DW Guillotine
User's Manual

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Chapter 1

About the DW Guillotine

In This Chapter

PURPOSE OF THIS MANUAL

HOW TO USE THE MANUAL

SYMBOLS AND WARNINGS

MANUAL UPDATES AND REVISION TRACKING

EQUIPMENT DESCRIPTION

PURPOSE OF THIS MANUAL

This manual explains how to operate and maintain the DW (diamond wire) Guillotine. It includes instructions for set-up, operation, and maintenance. It also contains parts lists, diagrams, and service information to help you order replacement parts and perform user-serviceable repairs.

Before operating the DW Guillotine, you should read through this manual and become familiar with all instructions.

HOW TO USE THE MANUAL

This manual is organized to help you quickly find the information you need. Each chapter describes a specific topic on using or maintaining your equipment.

Each page is designed with two columns. This large column on the inside of the page contains instructions and illustrations. Use these instructions to operate and maintain the equipment.

The narrower column on the outside contains additional information such as warnings, special notes, and definitions. Refer to it for safety notes and other information.

Throughout this manual, refer to this column for warnings, cautions, and notices with supplementary information.

SYMBOLS AND WARNINGS

The following symbols are used throughout this manual to indicate special notes and warnings. They appear in the outside column of the page, next to the section they refer to. Make sure you understand what each symbol means, and follow all instructions for cautions and warnings.

This is the **safety alert symbol**. It is used to alert you to **potential personal injury hazards**. Obey all safety messages that follow this symbol to avoid possible injury or death.

This is the **equipment damage alert symbol**. It is used to alert you to **potential equipment damage situations**. Obey all messages that follow this symbol to avoid damaging the equipment or workpiece on which it is operating.

WARNING

A WARNING alert with the safety alert symbol indicates a potentially hazardous situation that **could** result in **serious injury or death**.

CAUTION

A CAUTION alert with the safety alert symbol indicates a potentially hazardous situation that **could** result in **minor or moderate injury**.

CAUTION

A CAUTION alert with the damage alert symbol indicates a situation that **will** result in **damage to the equipment**.

IMPORTANT

An IMPORTANT alert with the damage alert symbol indicates a situation that **may** result in **damage to the equipment**.

NOTE

This symbol indicates a user note. **Notes** provide additional information to supplement the instructions, or tips for easier operation.

NOTE

A NOTE provides supplementary information or operating tips.

MANUAL UPDATES AND REVISION TRACKING

Occasionally, we will update manuals with improved operation or maintenance procedures, or with corrections if necessary. When a manual is revised, we will update the revision history on the title page.

You may have factory service or upgrades performed on the equipment. If this service changes any technical data or operation and maintenance procedures, we will include a revised manual when we return the equipment to you.

Current versions of E.H. Wachs Company manuals are also available in PDF format. You can request an electronic copy of this manual by emailing customer service at sales@ehwachs.com.

EQUIPMENT DESCRIPTION

The DW Guillotine is designed to perform fast, square cut-offs of pipes 4”-16” (102-406 mm) in diameter. The machine is compact, light-weight, and easy to set up. It uses a diamond-studded wire that cuts through all common pipe materials.

The following figures illustrate the machine’s features and components.

It operates on a standard Type II hydraulic tool circuit (8 gpm [30 l/min] flow at 1500 psi (103 bar]).

Figure 1-1. The photo shows the DW Guillotine mounted and ready to cut.

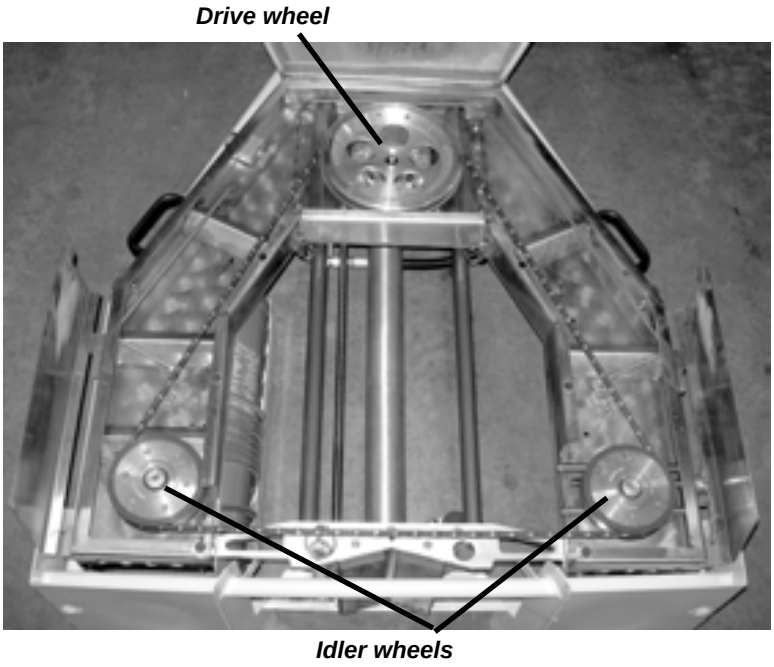


Figure 1-2. The drive wheel runs on the shaft of the hydraulic motor. The idler wheels spin freely with the motion of the wire.

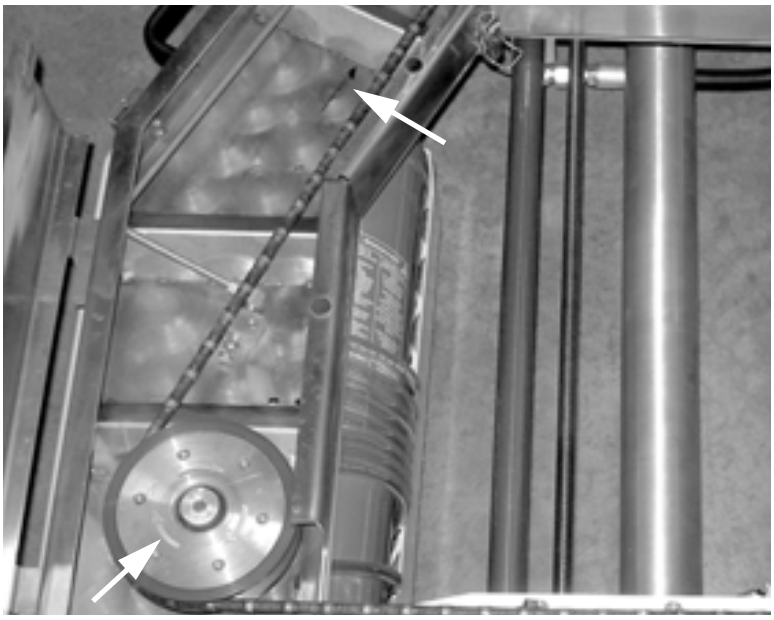


Figure 1-3. Direction arrows on the wheels and frame show the direction of wire rotation.

Figure 1-4. A clamping strap with a ratcheting clamp holds the machine to the pipe.

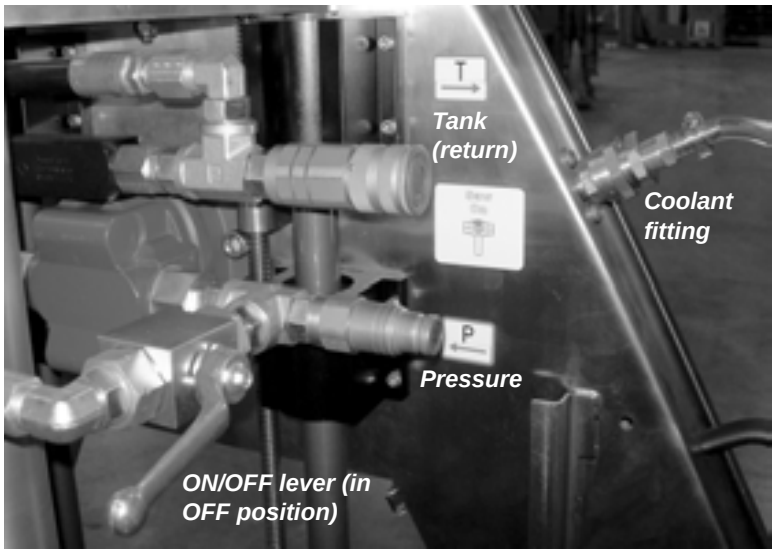


Figure 1-5. The photo shows the fittings and controls on the machine.

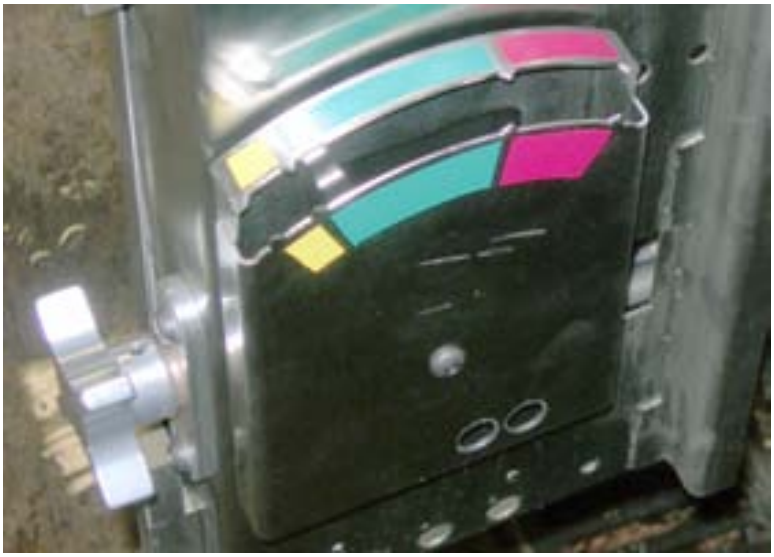


Figure 1-6. The tensioning gauge monitors the tension on the wire as it cuts.

- The indicator should be below the yellow band when the machine is not in use. Leaving tension on the wire during storage could damage the wheel inserts.
- The indicator should be in the yellow band when the machine is ready for cutting.
- The indicator should be in the green band (as shown in photo) when cutting. Operate the feed handle to keep the indicator in the green band.
- If the indicator is in the red band, the tension is too high. Reduce the feed rate.

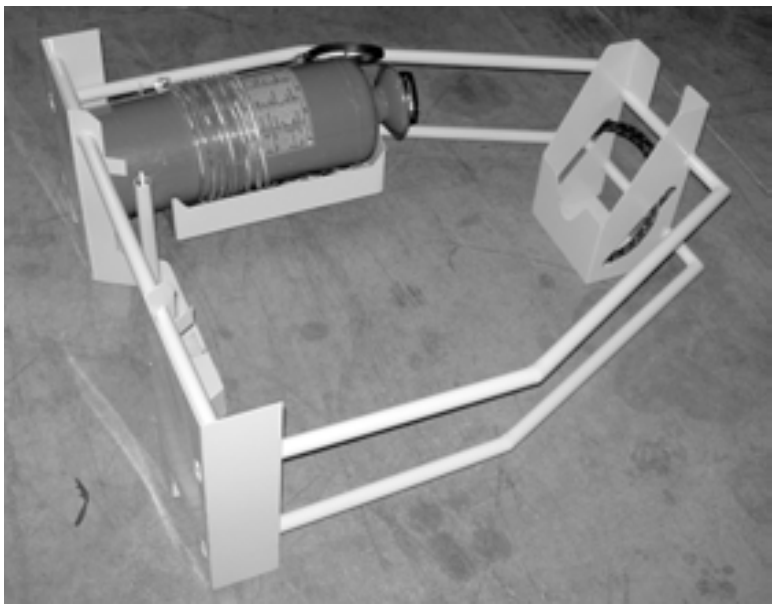


Figure 1-7. A storage stand is provided to hold the machine and accessories. The coolant sprayer provides water for cutting lubrication.

Chapter 2
Safety

In This Chapter

OPERATOR SAFETY

SAFETY LABELS

The E.H. Wachs Company takes great pride in designing and manufacturing safe, high-quality products. We make user safety a top priority in the design of all our products.

Read this chapter carefully before operating the equipment. It contains important safety instructions and recommendations.

OPERATOR SAFETY

Follow these guidelines for safe operation of the equipment.

- **READ THE OPERATING MANUAL.** Make sure you understand all setup and operating instructions before you begin.
- **INSPECT MACHINE AND ACCESSORIES.** Before starting the machine, look for loose bolts or nuts, leaking lubricant, rusted components, and any other physical conditions that may affect operation. Properly maintaining the machine can greatly decrease the chances for injury.
- **ALWAYS READ PLACARDS AND LABELS.** Make sure all placards, labels, and stickers are clearly legible and in good condition. You can purchase replacement labels from E.H. Wachs Company.
- **KEEP CLEAR OF MOVING PARTS.** Keep hands, arms, and fingers clear of all rotating or moving parts.

Look for this symbol throughout the manual. It indicates a personal injury hazard.

Always turn machine off before doing any adjustments or service.

- **SECURE LOOSE CLOTHING AND JEWELRY.** Secure or remove loose-fitting clothing and jewelry, and securely bind long hair, to prevent them from getting caught in moving parts of the machine.
- **KEEP WORK AREA CLEAR.** Keep all clutter and nonessential materials out of the work area. Only people directly involved with the work being performed should have access to the area.

Safety Symbols

This icon is displayed with any safety alert that indicates a personal injury hazard.

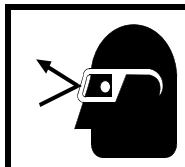
⚠ WARNING

This safety alert indicates a potentially hazardous situation that, if not avoided, **could** result in **death or serious injury**.

⚠ CAUTION

This safety alert, with the personal injury hazard symbol, indicates a potentially hazardous situation that, if not avoided, **could** result in **minor or moderate injury**.

Protective Equipment Requirements



WARNING

Always wear impact resistant eye protection while operating or working near this equipment.

For additional information on eye and face protection, refer to Federal OSHA regulations, 29 Code of Federal Regulations, Section 1910.133., Eye and Face Protection and American National Standards Institute, ANSI Z87.1, Occupational and Educational Eye and Face Protection. Z87.1 is available from the American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018.

CAUTION

Personal hearing protection is recommended when operating or working near this tool.

Hearing protectors are required in high noise areas, 85 dBA or greater. The operation of other tools and equipment in the area, reflective surfaces, process noises, and resonant structures can increase the noise level in the area. For additional information on hearing protection, refer to Federal OSHA regulations, 29 Code of Federal Regulations, Section 1910.95, Occupational Noise Exposure and ANSI S12.6 Hearing Protectors.

SAFETY LABELS

The following safety labels are included on the machine. If any labels are lost or damaged, order replacements. See ordering information and parts lists in Chapter 5.

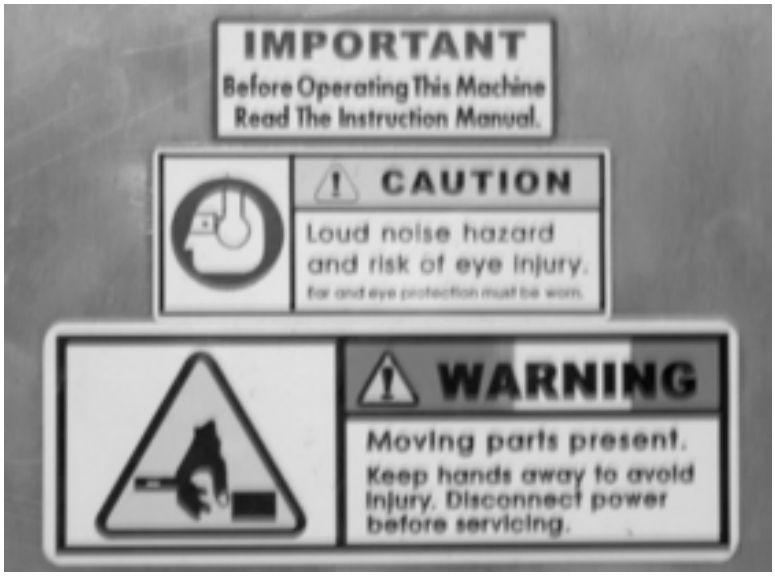


Figure 2-1. Follow all safety guidelines for operating the machine.

Chapter 3

Operating Instructions

In This Chapter

MOUNTING THE MACHINE

MAKING THE CUT

CLEANING AND REMOVING THE MACHINE

MOUNTING THE MACHINE

The DW Guillotine weighs about 65 lb (30 kg). It can be handled safely by two operators using the handles on the sides of the frame. You can also use a lifting device attached to the lift hook on top of the machine.

Use the DW Guillotine only on horizontal pipe. The clamping system is not designed to hold it on a vertical pipe.

1. Remove the locking pin from the end of the fastening rod in the storage frame.

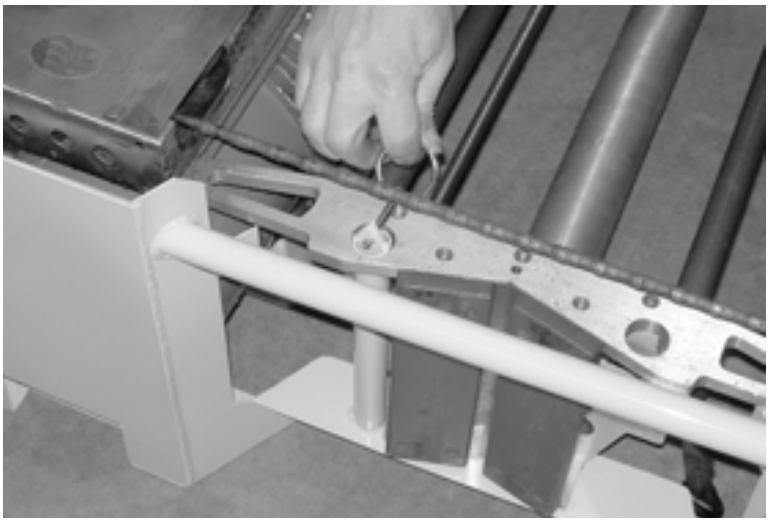


Figure 3-1. Pull the locking pin out of the fastening rod.

WARNING

Do not lift the DW Guillotine by yourself. The machine is too heavy and bulky to be lifted safely by one operator; serious injury could result.

2. Lift the machine out of the storage frame. It can be lifted by two operators, using the handles.

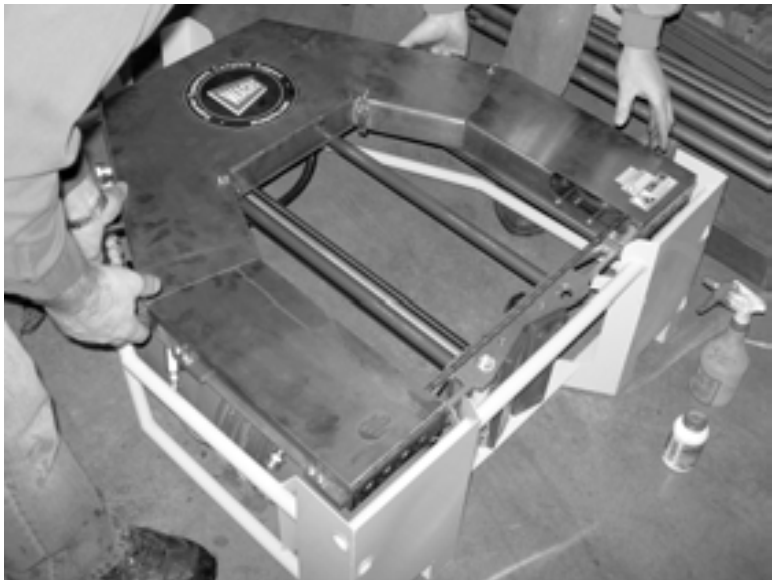


Figure 3-2. Lift the machine out of the storage frame.

NOTE

The bow is fully retracted (up) when it is stored in the frame. Mount the machine with the bow retracted.

3. Set the machine on the pipe at the cutting location, with the saddle on a supported section of pipe. The cutting wire will be toward the fall-off end of the pipe.

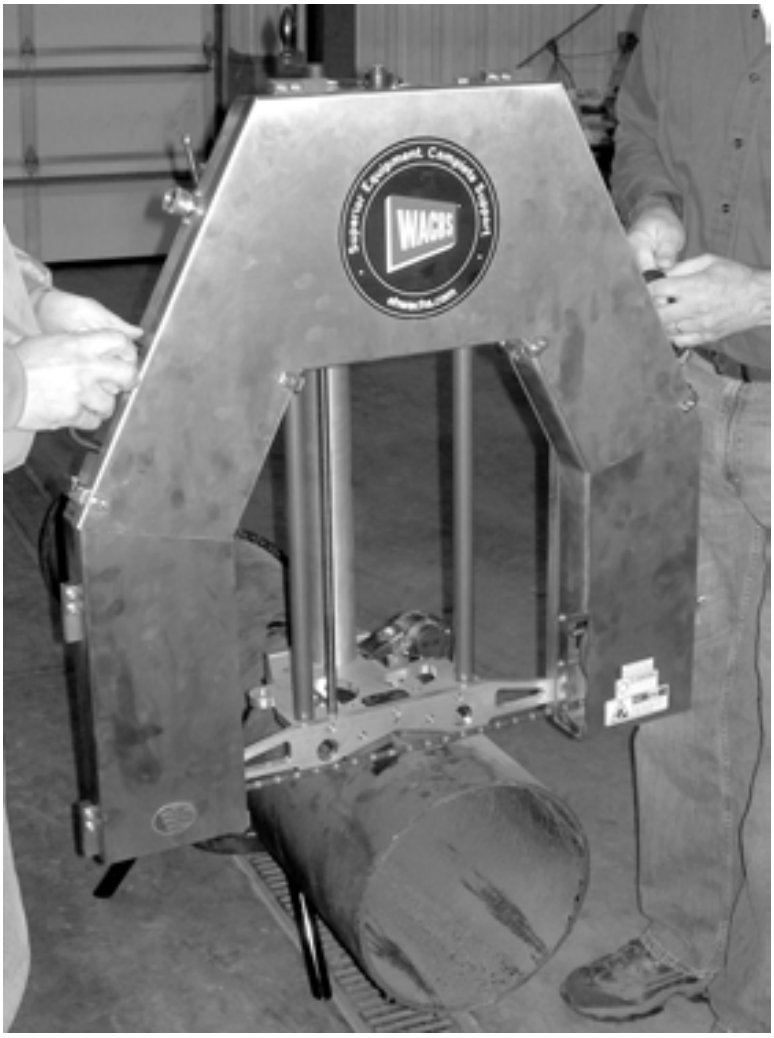


Figure 3-3. Set the machine on the pipe, with the wire on the fall-off side of the cut.

4. Position the machine to align the wire at the required cut line.

NOTE

It is recommended that you support or set up a catch device for the fall-off piece of pipe. If you are cutting in-line pipe, make sure the pipe is supported on both sides of the cut.

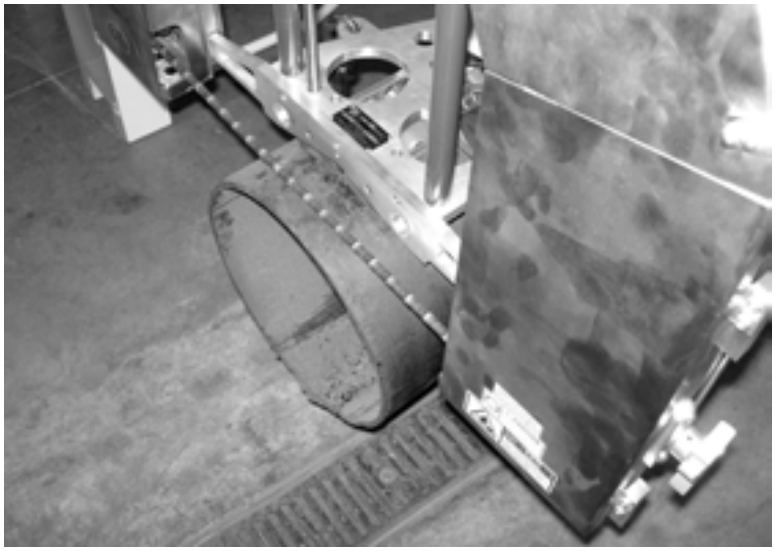


Figure 3-4. Position the machine so the wire is at the cut line location.

5. Press and hold the release button on the clamping ratchet to pull out the strap.

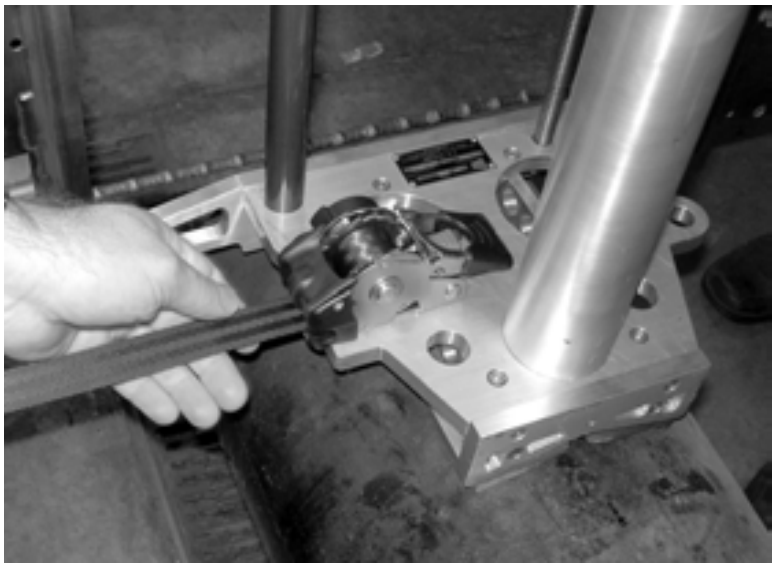


Figure 3-5. Pull out enough strap to wrap around the pipe

6. Wrap the strap around the pipe. Put the hook through the clamping hole on the opposite side of the frame.

Figure 3-6. Wrap the clamping strap around the pipe and fasten the hook through the hole as shown.

7. Operate the clamping ratchet to tighten the strap. Clamp the strap as tight as you can get it with the ratchet handle.

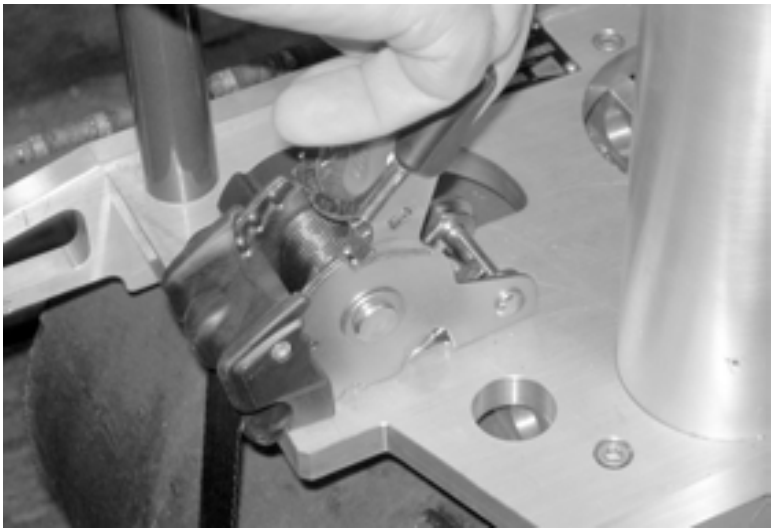


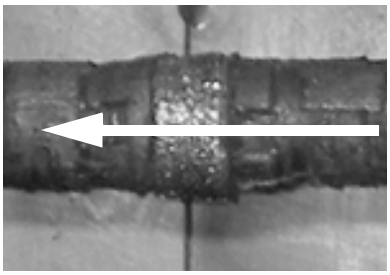
Figure 3-7. Operate the ratchet to tighten the clamping strap.

CAUTION

Make sure the machine is securely attached to the pipe before operating it.

NOTE

Inspect the wire closely to see the taper of the bead.



MAKING THE CUT

Check the diamond wire and make sure it is installed in the right direction.

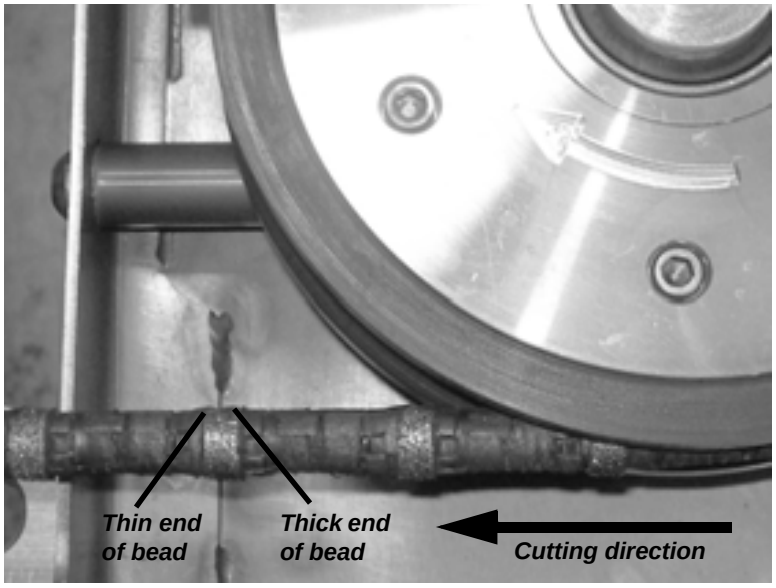


Figure 3-8. Check that the wire is installed in the correct direction. The thinner end of the cutting bead should lead.

1. With the hydraulic power unit off, connect the hydraulic hoses to the machine.

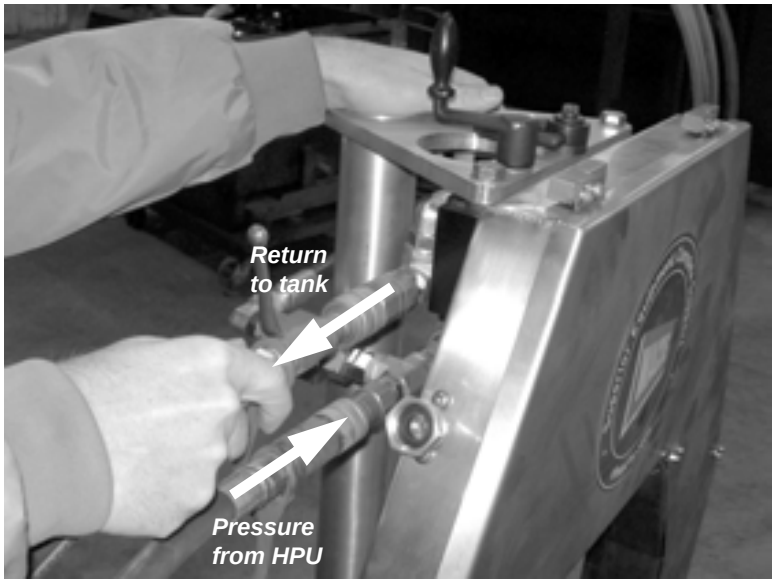


Figure 3-9. Connect the hydraulic hoses.

2. Attach a water hose to the coolant fitting on the cover. If a water supply is available, you can attach a garden hose to the fitting. A hand sprayer tank and hose are provided if necessary.

Figure 3-10. Attach a water hose to the coolant fitting.

3. Set the wire tension by turning the tensioning knob. The tension indicator should be in the middle of the yellow band when not cutting.

Figure 3-11. With no load on the wire, the tension gauge indicator should be in the yellow.

CAUTION

Water is required to cool and lubricate the wire during cutting. Do not operate the machine without a water source for the sprayer.

4. Turn the feed handle to advance the bow down until the wire is close to the pipe surface.

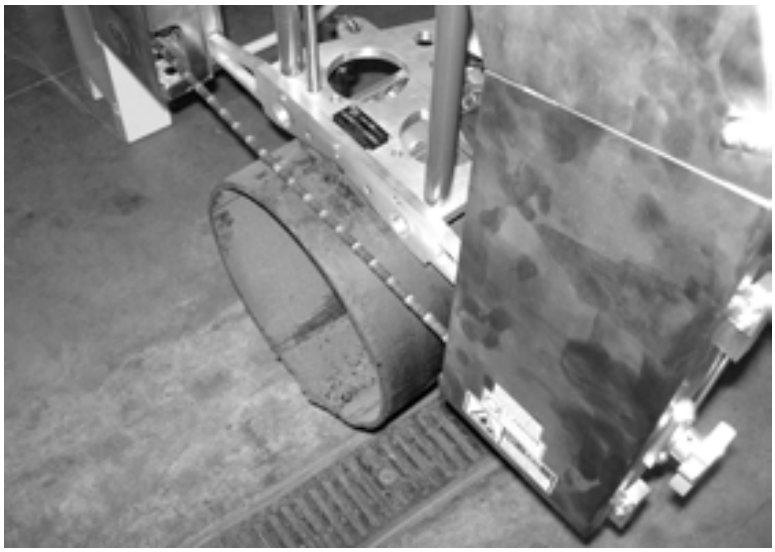


Figure 3-12. Feed the bow down until the wire almost touches the pipe.

5. Make sure the ON/OFF lever is in the OFF position (horizontal).

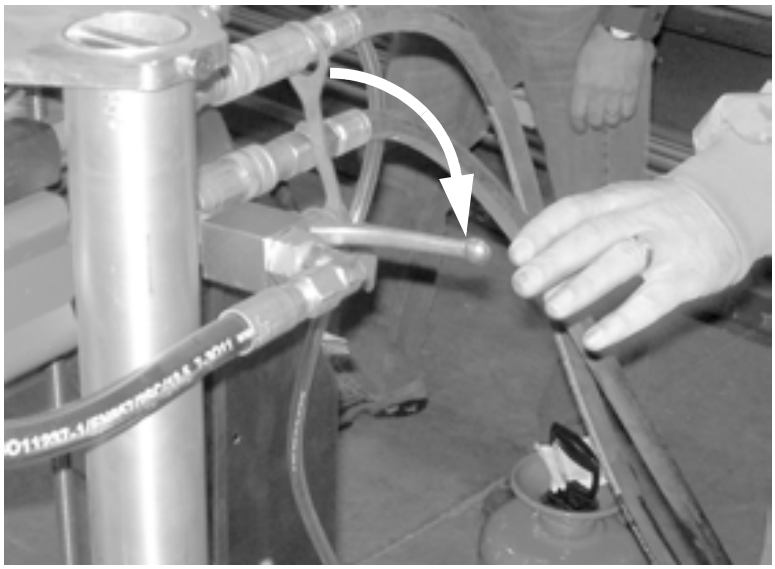


Figure 3-13. Make sure the machine is turned off before starting the HPU.

6. Power on the HPU. Set the flow to 8 gpm (30 l/min) and the pressure to 1500 psi (103 bar).

7. Turn the ON/OFF lever to the ON (vertical) position. The wire will start running.

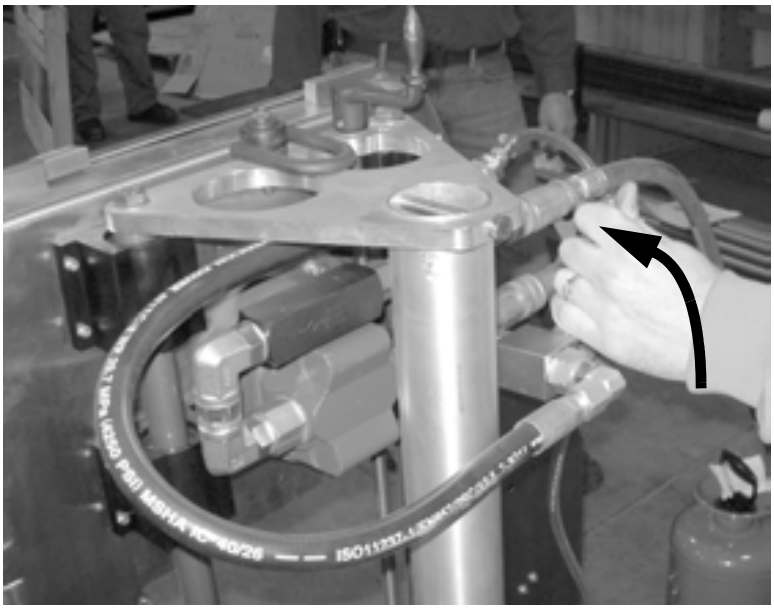


Figure 3-14. Turn the ON/OFF lever up to the ON position.

8. Turn on the cooling water supply.

Figure 3-15. The coolant spray tank has an on-off valve on the hose.

9. Turn the feed handle to advance the wire into the pipe. Watch the tension gauge as you operate the feed handle. Feed at a rate that keeps the indicator within the green band on the gauge.

WARNING

Keep away from the wire while the machine is operating. The wire runs at very high speed and can cause serious injury.

NOTE

Generally, you can feed faster through the center of the pipe, and slower through the crown at the top and bottom.

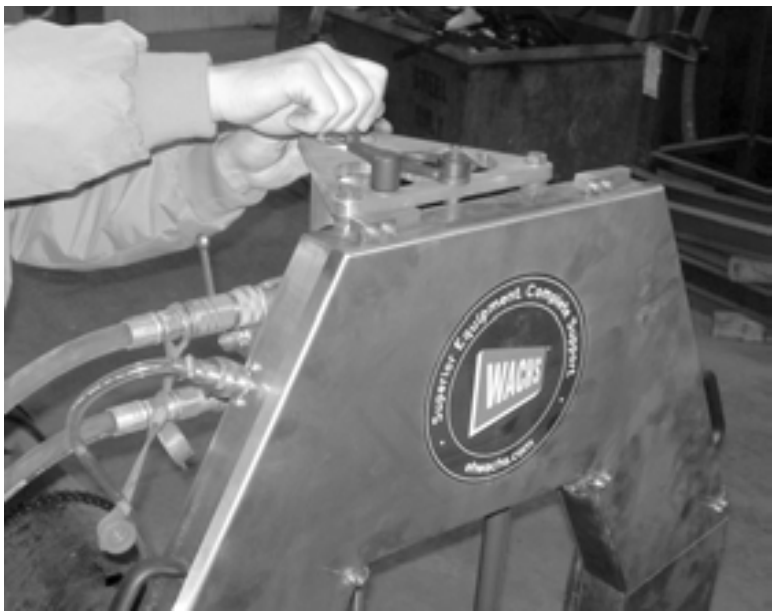


Figure 3-16. Turn the feed handle to advance the wire into the pipe.

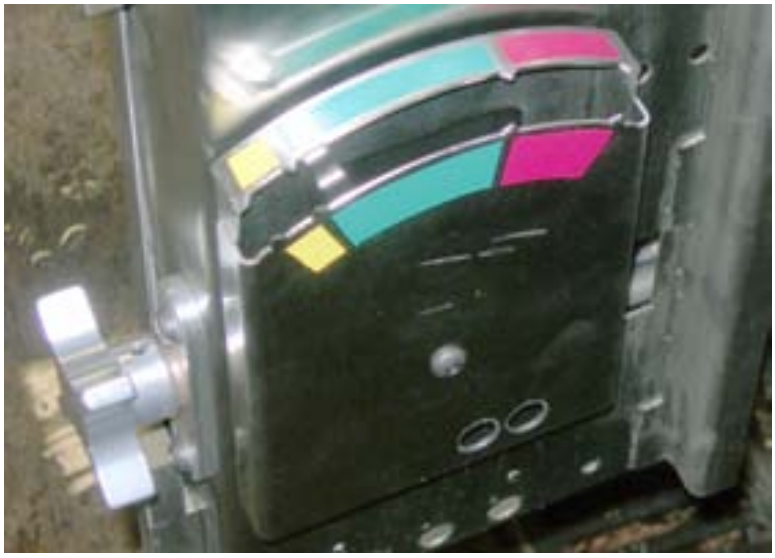


Figure 3-17. Operate the feed handle to keep the tension gauge indicator in the green band.

10. Make sure there is a continuous supply of water as you cut. If you are using the sprayer tank, you will need to pump it occasionally to pressurize it.

11. Use caution as you approach the end of the cut:

- If you are cutting off the end of the pipe, support the fall-off piece, or be sure to stand clear of it when it falls.
- If you are cutting in-line pipe, there may be stress on the pipe that will cause it to “spring” when cut, or snap off near the end of the cut. Use appropriate safety procedures at your worksite for cutting stressed pipes.

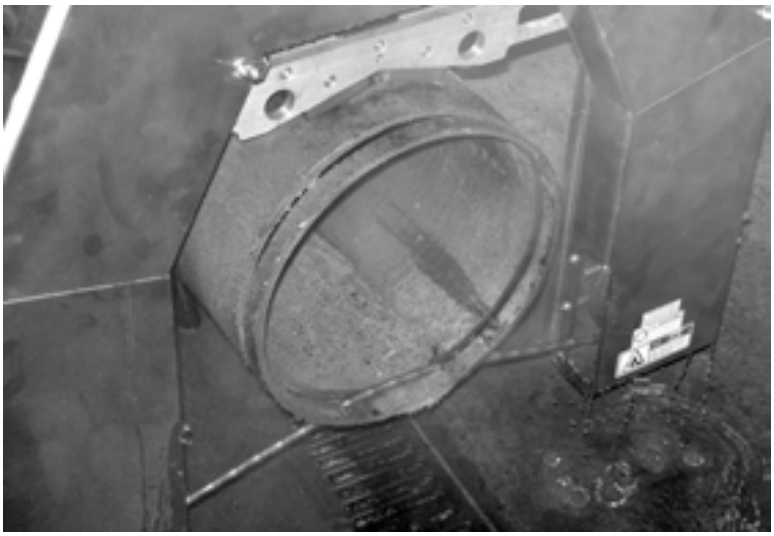


Figure 3-18. Use caution as you approach the end of the cut.

12. Finish the cut by feeding the wire past the bottom of the pipe.
13. Turn off the water to the coolant sprayer.
14. Turn the ON/OFF lever to the OFF position.

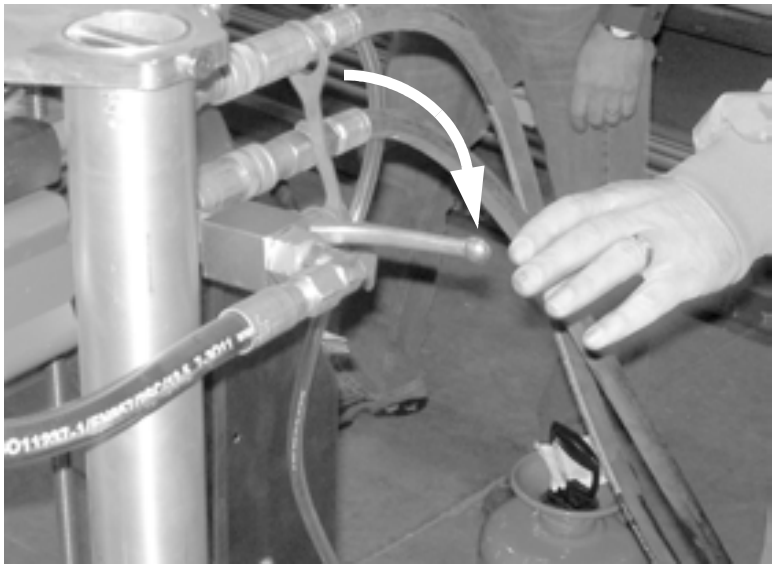


Figure 3-19. Turn the ON/OFF lever to the OFF position.

15. Turn off power at the HPU.

CLEANING AND REMOVING THE MACHINE

The DW Guillotine will be easier to clean if you leave it mounted vertically on the pipe. Spray and lubricate the machine, then remove it.

NOTE

If the wire binds against the pipe while retracting the bow, start the machine to run the wire while feeding the bow back to the top.

1. Turn the feed handle to fully retract the bow all the way to the top.
2. Disconnect the hydraulic hoses from the machine.

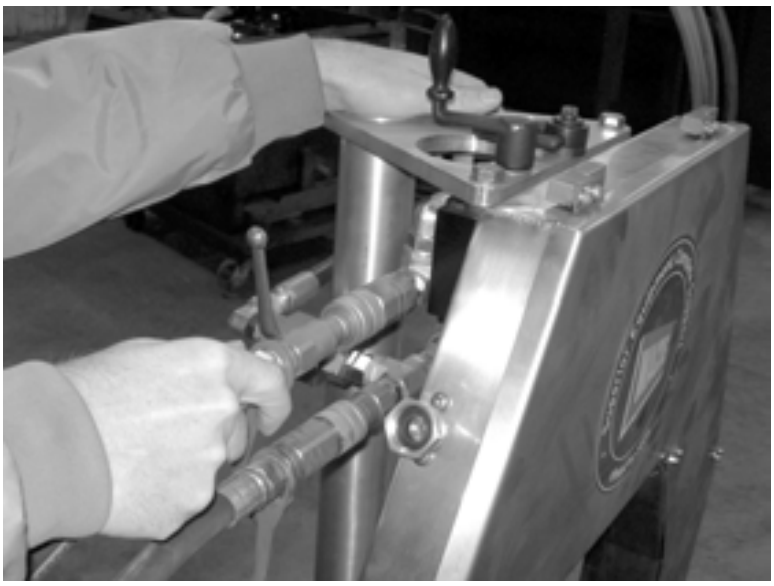


Figure 3-20. Remove the hydraulic hoses from their fittings.

3. Turn the tensioning knob to take the tension off the wire. Leave the wire mounted on the wheels.

Figure 3-21. Loosen the tension knob to take the tension off the wire. The tension gauge indicator should be all the way to the left (below the yellow band).

4. Release the cover latches and open the covers.

IMPORTANT

Store the machine with all tension relieved from the wire. Leaving tension on the wire could damage the wheel liners.

NOTE

You can use the coolant sprayer to clean the machine.

5. Spray all components thoroughly with water to wash off cutting debris.

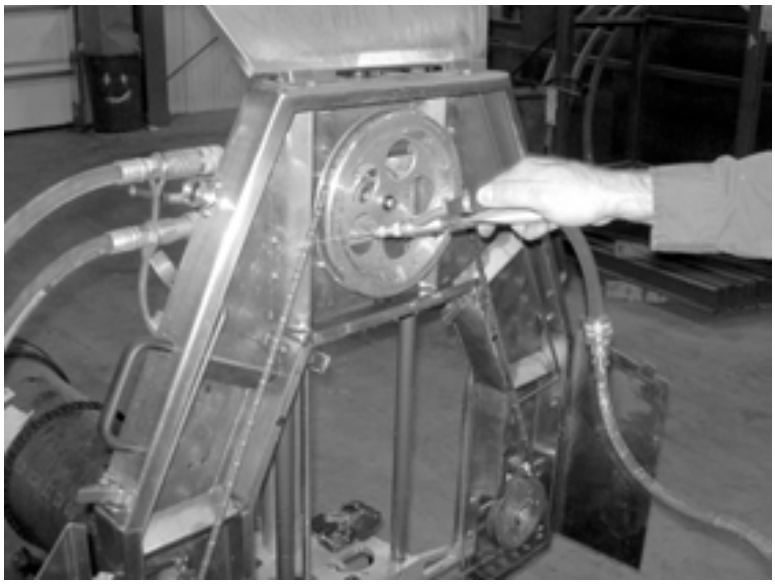


Figure 3-22. Spray the inside of the machine thoroughly to clean out cutting debris.

6. Spray the following components with a water-displacing lubricant (such as WD-40):

- feed screw
- guide rods
- wheels
- tensioning knob
- clamping ratchet.

Figure 3-23. Spray water-displacing lubricant on moving parts before storage.

7. Hold the , or secure it with a support device, to keep it from falling when you release the clamping strap.

8. Press the release button on the clamping ratchet. Pull out enough strap to disconnect the hook from the frame, and rewind the strap in the ratchet.

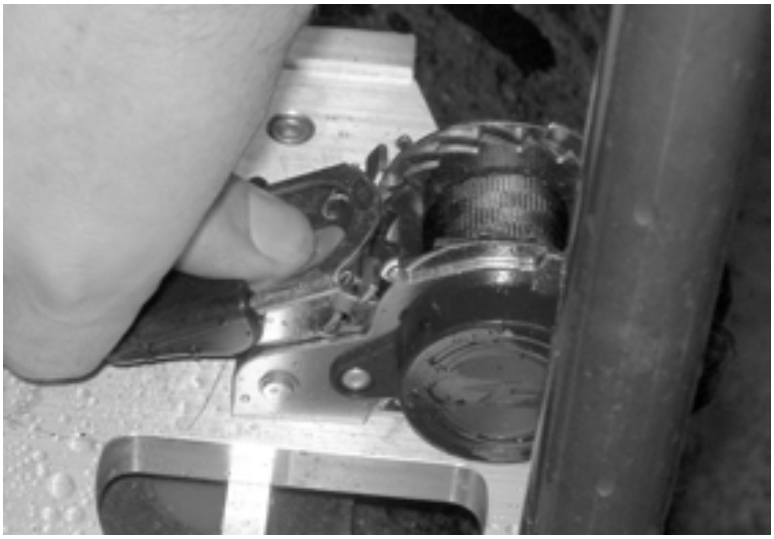


Figure 3-24. Press the button on the clamping ratchet to release the strap.

WARNING

Make sure you are supporting the machine when you release the clamping ratchet. It could shift or fall from the pipe, causing serious injury.

NOTE

Store the coolant sprayer in the frame before the machine.

9. Lift the machine from the pipe. Lay it in the storage frame, with the fastening rod through the hole in the saddle frame.

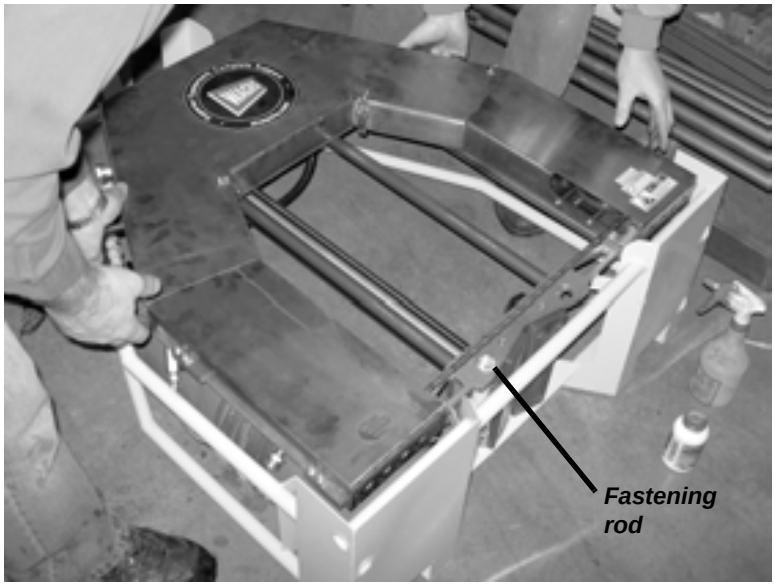


Figure 3-25. Set the DW Guillotine down in the storage frame.

10. Replace the locking pin in the fastening rod.

Figure 3-26. Put in the locking pin to secure the machine in the storage frame.

Chapter 4
Maintenance

In This Chapter

LUBRICATION

REPLACING THE CUTTING WIRE

REPLACING THE WHEEL LINERS

REPLACING THE MOUNTING SHOES

LUBRICATION

1. Every time you use the , spray the following components with a water-displacing lubricant (such as WD-40):

   - feed screw
   - guide rods
   - wheels
   - tensioning knob
   - clamping ratchet.

REPLACING THE CUTTING WIRE

1. Turn the feed handle to retract the bow all the way to the top.
2. Turn the tension knob to fully release the tension on the wire.

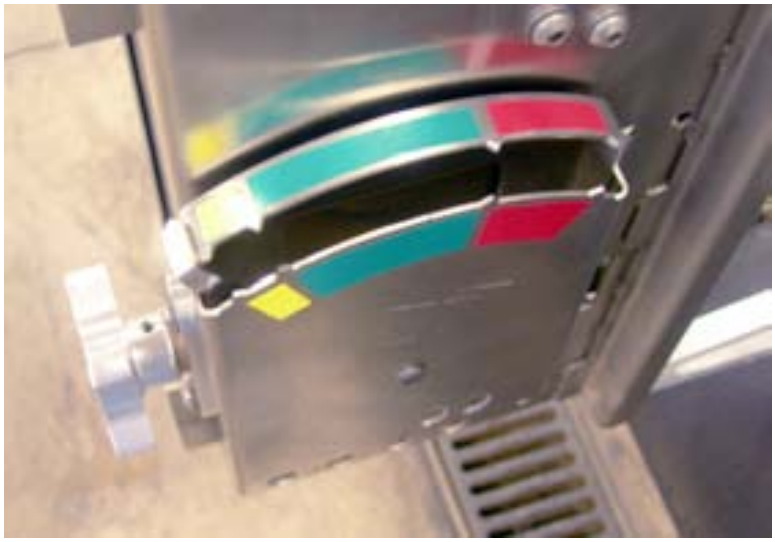


Figure 4-1. Fully release the tension on the wire.

3. Release the cover latches and open all of the covers.

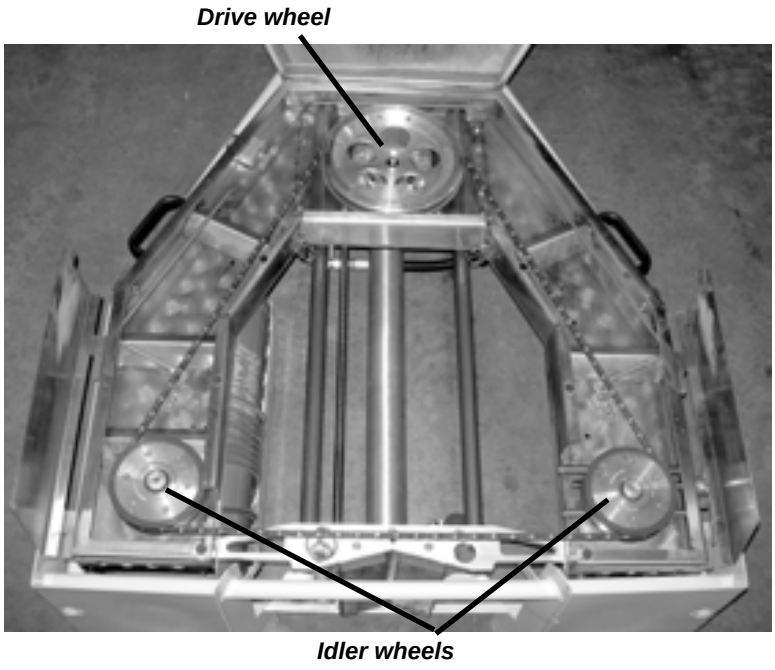


Figure 4-2. Open the covers to access the wire.

4. Pull the wire off the drive wheel at the top, then remove the wire.

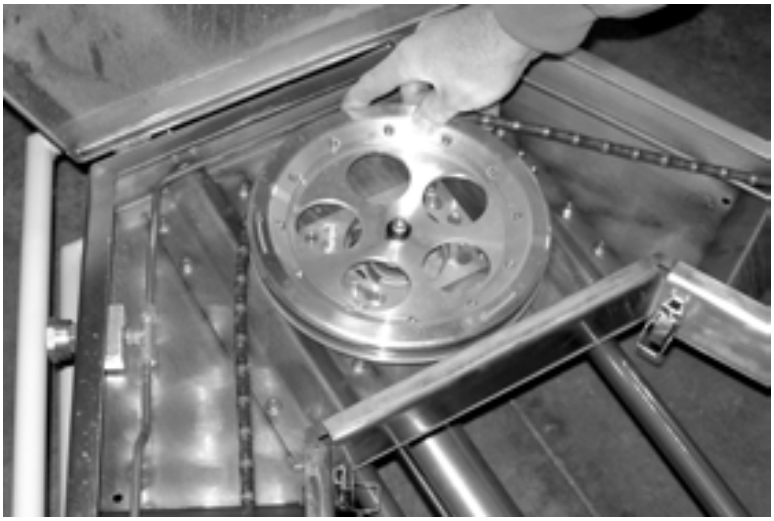


Figure 4-3. Remove the wire from the drive wheel first.

5. When putting on the new wire, make sure it is installed in the correct direction. The machine will not cut properly with the wire installed wrong.

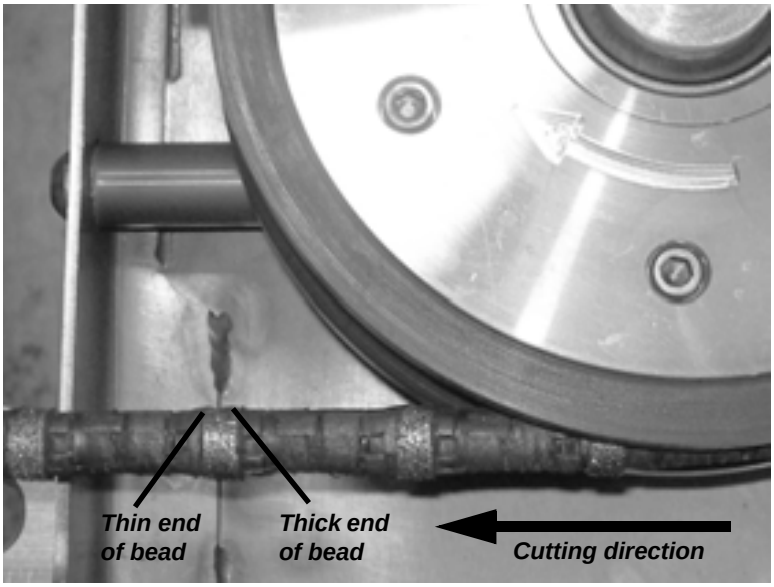
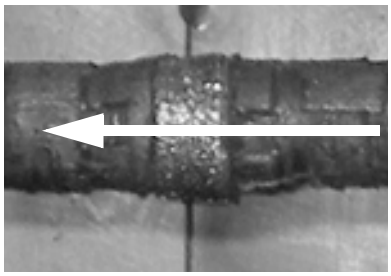


Figure 4-4. Check that the wire is installed in the correct direction. The thinner end of the cutting bead should lead.

6. Install the new wire over the drive wheel, then over the idler wheels.

NOTE

Inspect the wire closely to see the taper of the bead.



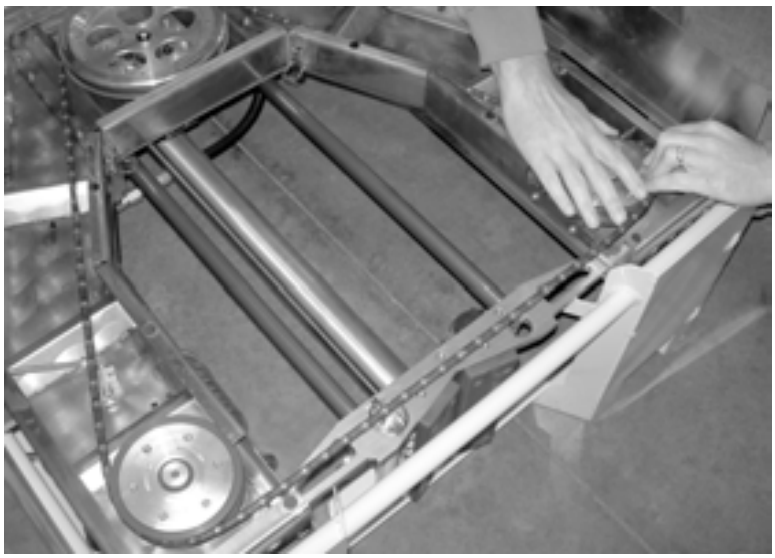


Figure 4-5. Put the new wire over the wheels.

7. Close and latch the covers.

8. Turn the tension knob until the tension gauge indicator is just into the yellow band.

REPLACING THE WHEEL LINERS

The liners on the cutting wire wheels are durable and long-lasting. They may wear out after extensive use, or be damaged if the machine malfunctions. If necessary, replace them using the following procedure.

The drive wheel uses a different liner than the idler wheels.

1. Release the cover latches and open all of the covers.

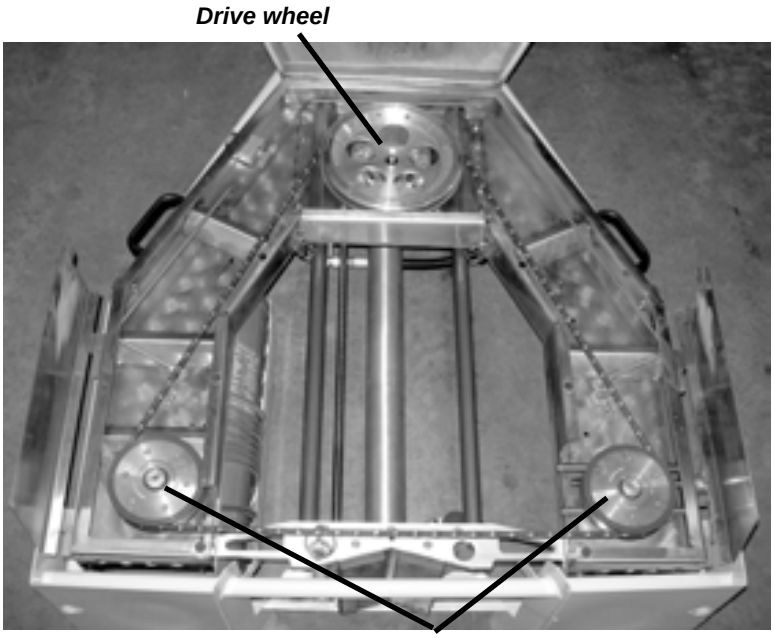


Figure 4-6. Open the covers to access the wheels.

2. Remove the wire as described in the previous section.
3. Remove the screws holding on the cover of the wheel you are repairing.

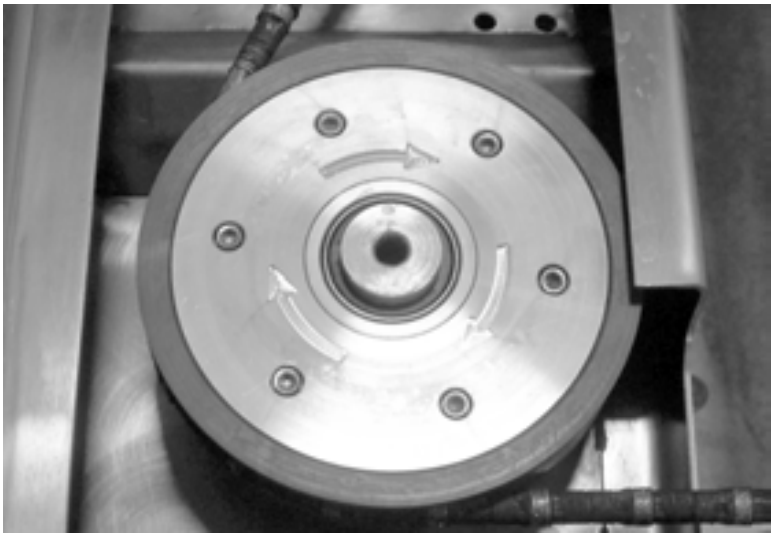


Figure 4-7. The idler wheels have 6 screws holding the cover.

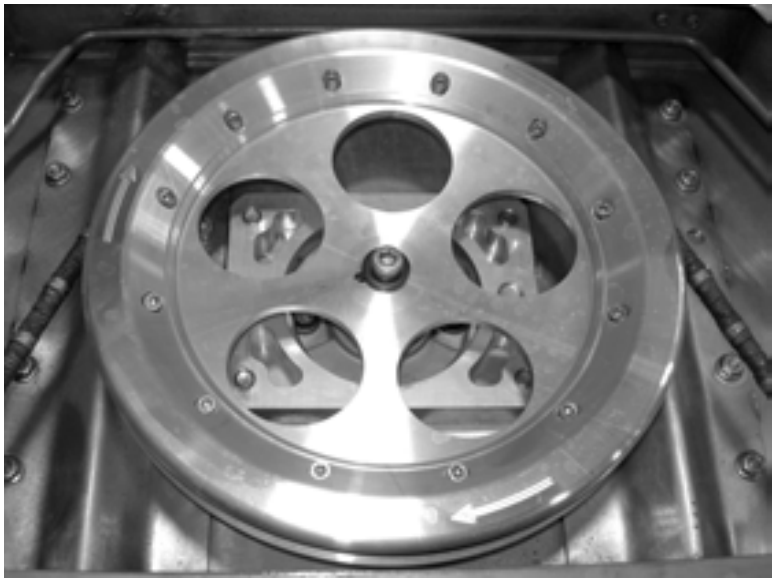


Figure 4-8. The drive wheel has 12 screws holding the cover

4. Pull the cover off the wheel. You may have to pry gently with a screwdriver to get it off.

5. Pull off the wheel liner. Press the new liner onto the wheel.

6. Replace the wheel cover and insert the screws. Tighten the screws securely.

REPLACING THE MOUNTING SHOES

You may have to replace the mounting shoes if they are damaged or worn. Four screws attach each shoe to the frame.

1. Remove the 4 screws holding the shoe in place.

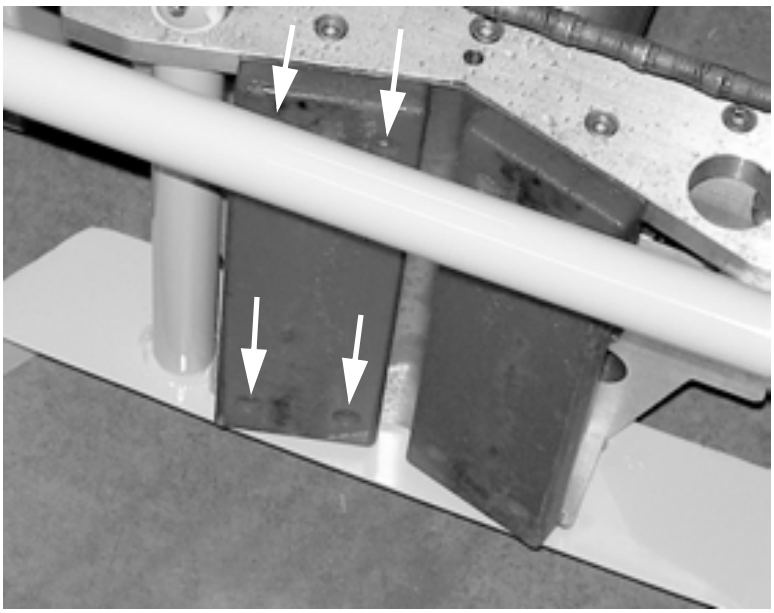


Figure 4-9. Each mounting shoe is held on with 4 screws. Remove the screws to replace the shoe.

2. Remove the shoe.

3. Put the new shoe in place and replace the screws Tighten the screws securely.

Chapter 5

Parts List and Ordering Information

In This Chapter

ORDERING INFORMATION

DRAWINGS AND PARTS LISTS

ORDERING INFORMATION

To place an order, request service, or get more detailed information on any E.H. Wachs Company products, call us at one of the following numbers:

U.S.	800-323-8185
International:	847-537-8800

You can also visit our Web site at:

www.ehwachs.com

Ordering Replacement Parts

When ordering parts, refer to the parts lists in this chapter. Please provide the part description and part number for all parts you are ordering.

Repair Information

Please call us for an authorization number before returning any equipment for repair or factory service. We will advise you of shipping and handling. When you send the equipment, please include the following information:

- Your name/company name
- Your address
- Your phone number

- A description of the problem or the work to be done.

Before we perform any repair, we will estimate the work and inform you of the cost and the time to complete it.

Warranty Information

Enclosed with the manual is a warranty card. Please fill out the registration card and return to E.H. Wachs Company. Retain the owner's registration record and warranty card for your information.

Return Goods Address

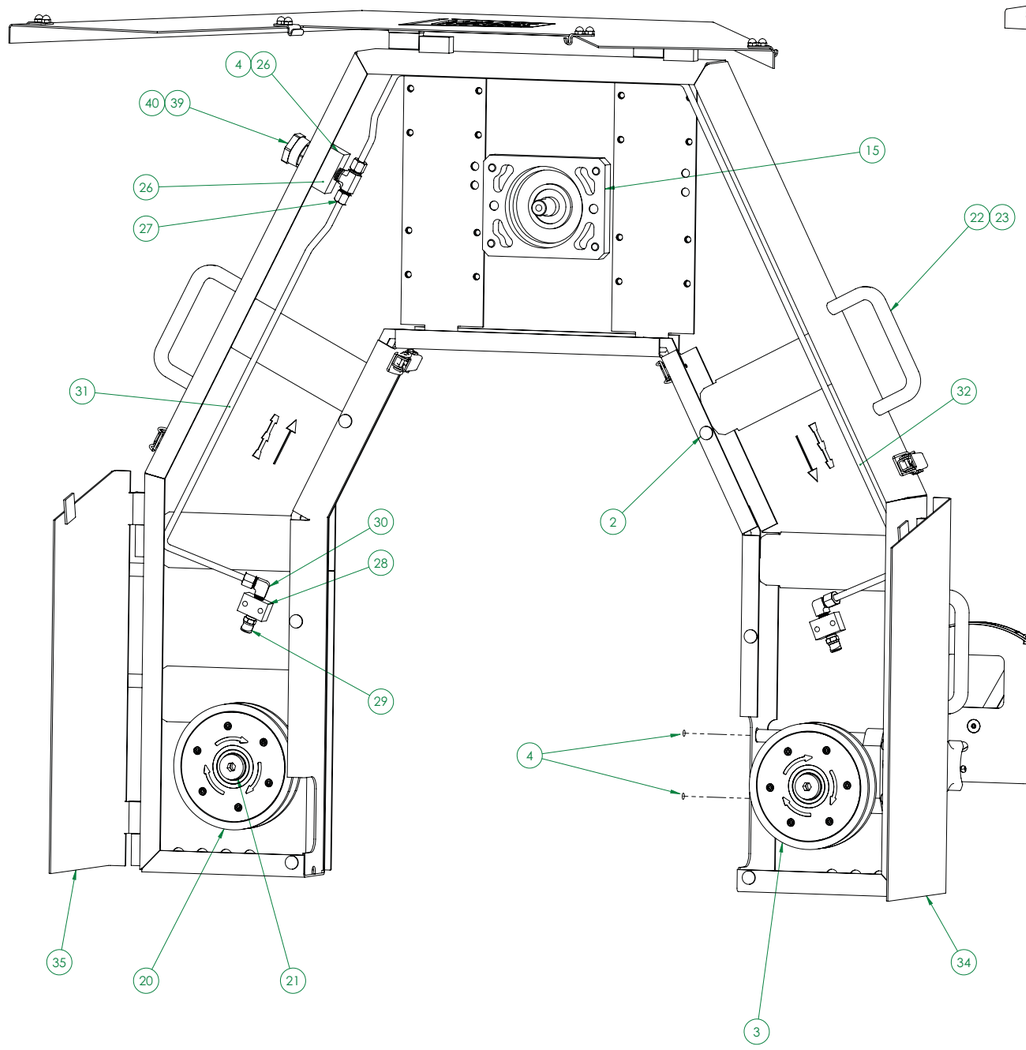
Return equipment for repair to the following address.

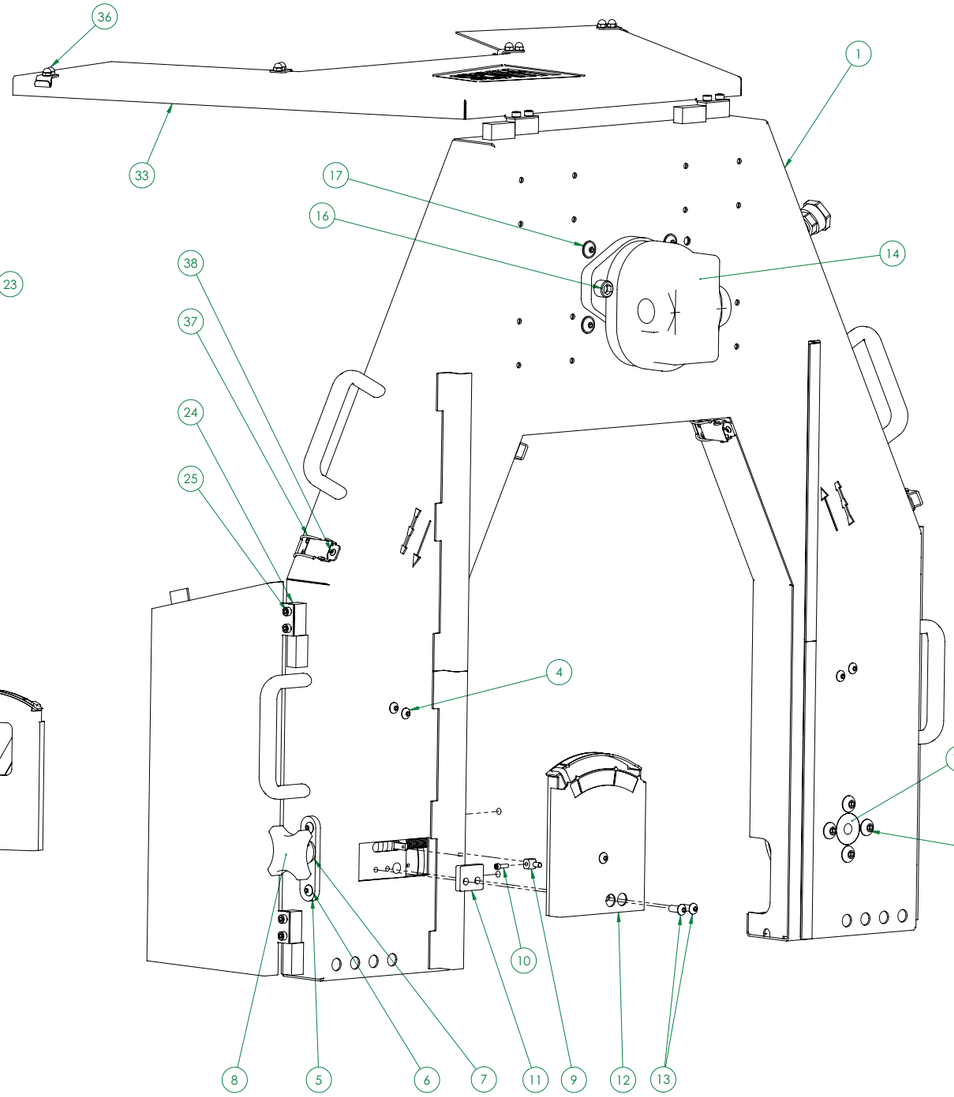
E.H. Wachs
600 Knightsbridge Parkway
Lincolnshire, Illinois 60069 USA

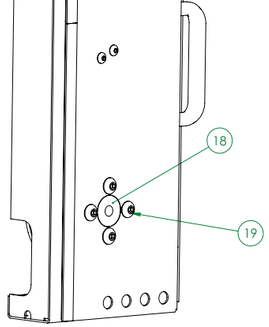
DRAWINGS AND PARTS LISTS

The drawings on the following pages illustrate the components of the DW Guillotine , and include parts lists for ordering spare or replacement parts.

NOTES:
1) APPLY LOCTITE 243 OR EQUAL TO ALL FASTENER MALE THREADS AT ASSEMBLY







ITEM	PART NUMBER	DESCRIPTION	QTY.
1	29-110-01-00	Bow Frame Assembly	1
2	29-010-01-09	RUBBER BUMPER	6
3	29-010-06-00	ASSEMBLY, SLIDE	1
4	90-152-05	BHCS 1/4-20 x .500	8
5	29-010-01-05	Tensioning Plate	1
6	90-152-08	BHCS 1/4-20 x .875	2
7	29-010-01-02	BEARING, TENSIONING SCREW	1
8	29-010-05-00	Tension Rod Assembly	1
9	29-010-01-06	Pointer Pin	1
10	90-100-05	SHCS, #6-32 X 1/2, SS 18-8	1
11	29-010-01-07	Pointer Spacer	1
12	29-010-07-00	Tension Indicator Assembly	1
13	90-152-06	BHCS 1/4-20 x .625	2
14	29-610-00-01	Drive Motor	1
15	29-610-00-02	Motor Mount Plate	1
16	90-180-12	SHCS 7/16-14x1-1/4, SS 18-8	2
17	90-169-07	5/16-18 x 3/4" FLBHSCS, SS 18-8	4
18	29-010-01-04	Wheel Mount	1
19	90-172-06	SBHCS .375-16 X 0.625	4
20	29-010-03-00	ASSEMBLY, IDLER WHEEL	1
21	29-010-01-03	SHAFT, IDLER WHEEL	1
22	29-010-01-01	HANDLE, LIFT	4
23	90-150-03	SHCS 1/4-20 X 3/8 SS	8
24	29-010-01-10	HINGE, DW GUILLOTINE COVER	6
25	90-640-02	M5 x 6 mm lg SHCS SS 18-8	24
26	29-310-00-01	Coolant Block	1
27	29-310-00-05	TEE, COOLANT	1
28	29-310-00-02	Nozzle Block	2
29	29-310-00-06	SPRAY NOZZLE	2
30	29-310-00-07	ELBOW, COOLANT	2
31	29-310-00-03	COOLANT LINE, LH	1
32	29-310-00-04	Right Coolant Line	1
33	29-110-02-00	WELDMENT, TOP COVER	1
34	29-110-03-00	WELDMENT, RH COVER	1
35	29-110-04-00	WELDMENT, LH COVER	1
36	90-105-18	ACORN NUT, 6-32, SS 18-8	8
37	29-010-01-08	Modified Latch	4
38	90-132-01	BHCS, 6-32 x 3/16, SS 18-8	8
39	29-310-00-08	GARDEN HOSE ADAPTER, 3/8 NPT SWIVEL	1
40	29-310-00-09	WASHER, HOSE W/SCREEN	1

APPROVED FOR PRODUCTION

E.H. WACHS COMPANY
455 Comanche Circle
Harvard, IL 60033
www.wachsco.com

TOLERANCES:
ONE PLACE DECIMAL ±.015 GENERAL FINISH
TWO PLACE DECIMAL ±.010 FRACTIONS ±1/32
THREE PLACE DECIMAL ±.005 ANGULAR ±1.5 MIN.

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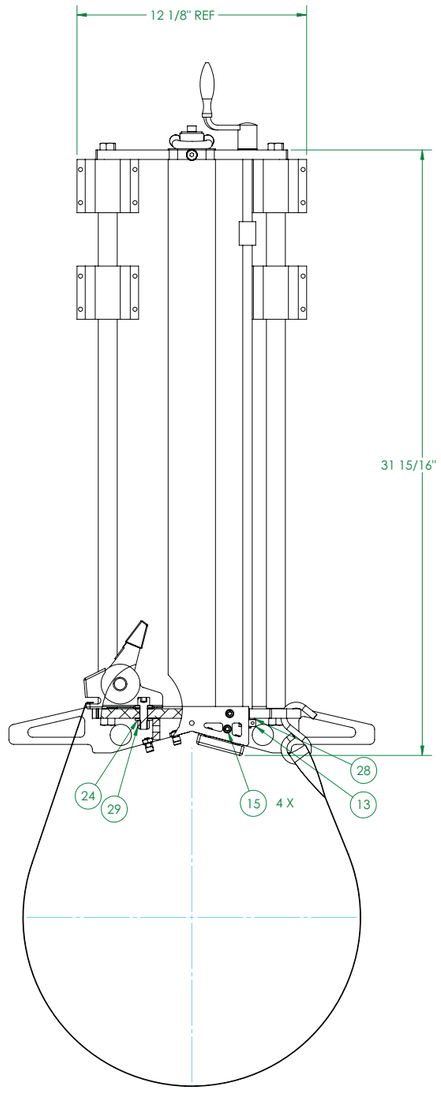
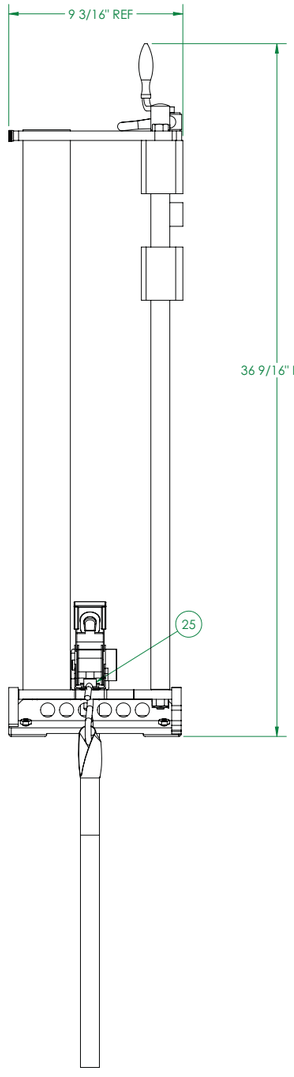
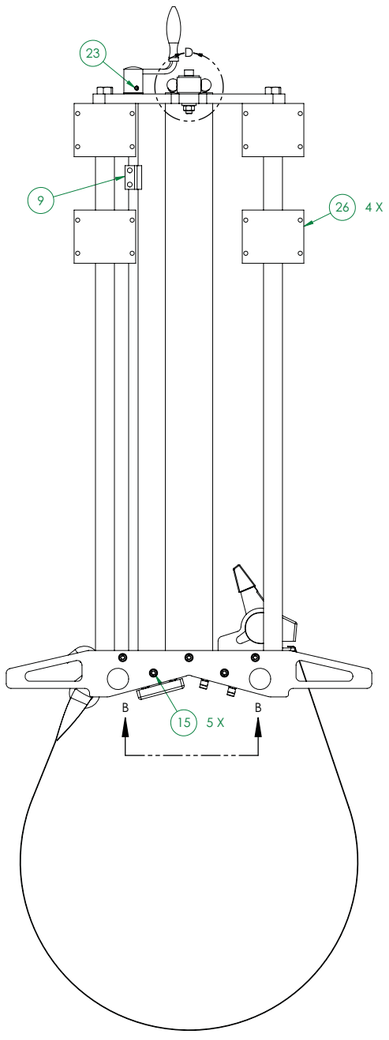
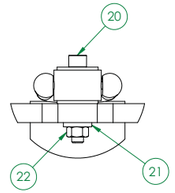
REV.	ECO #	DESCRIPTION	DATE	APR.
TITLE		Bow Assembly		
MATERIAL		DRAWN BY: GJD	DATE: 3/13/2012	SCALE: 1:3
FINISH		CHECKED BY: DAL	DATE: 3/16/2012	SHEET: 1 OF 1
SIZE: D	DWG. NO.: 29-010-01-00			REV.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	29-010-02-01	Top Saddle Plate	1
2	29-010-02-02	Front Saddle Plate	1
3	29-010-02-03	Rear Saddle Plate	1
4	29-010-02-09	Clamp Pad Shoe	2
5	29-110-05-00	Clamp Plate Assembly	1
6	29-010-02-06	Main Feed Tower Tube	1
7	29-010-02-05	Upper Guide Bar Plate	1
8	29-010-02-04	Guide Shaft	2
9	29-010-02-10	Feed Nut	1
10	29-010-02-08	Saddle Gusset	2
11	29-010-02-07	Feed Screw	1
12	29-010-02-11	Feed Handle	1
13	29-010-02-13	COLLAR, THREADED, DWG FEED SCREW	1
14	90-150-05	SHCS 1/4-20 X 1/2 SS	16
15	90-150-07	SHCS, 1/4-20 X 3/4, SS 18-8	13
16	90-077-35	3/8 x 3 1/2lg Shoulder Bolt	2
17	90-191-15	HHCS, 1/2-13 X 1-1/2	4
18	29-010-02-14	LIFTING RING	1
19	29-010-02-15	RATCHET STRAP	1
20	90-060-20	SHCS, 5/16-18 x 2.00	1
21	90-065-55	5/16 HARDENED WASHER	1
22	90-065-01	HEX NUT, 5/16-18	1
23	90-154-42	1/4-20 x 1/4 BRASS TIP SSS, SS 18-8	1
24	90-185-52	WASHER, 7/16 FLAT	2
25	90-180-12	SHCS 7/16-14x1-1/4, SS 18-8	1
26	29-010-02-16	LINEAR BEARING	4
27	29-010-02-17	THRUST BEARING, DWG FEED	1
28	29-010-02-18	THRUST BEARING, DWG FEED LOWER	1
29	90-185-08	NUT, 7/16-14 NYLOC, SS 18-8	1









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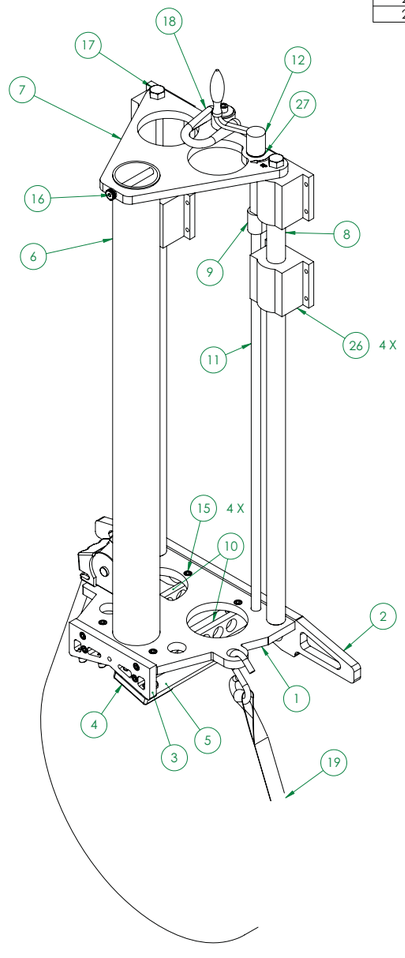
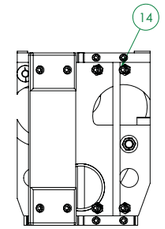
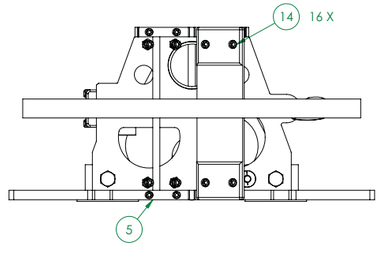
SCALE 1 : 2





SECTION B-B



ONE CLAMP PAD NOT SHOWN
FOR CLARITY

REV.	DESCRIPTION	DATE	APR.

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ANGULAR ±15 MIN.

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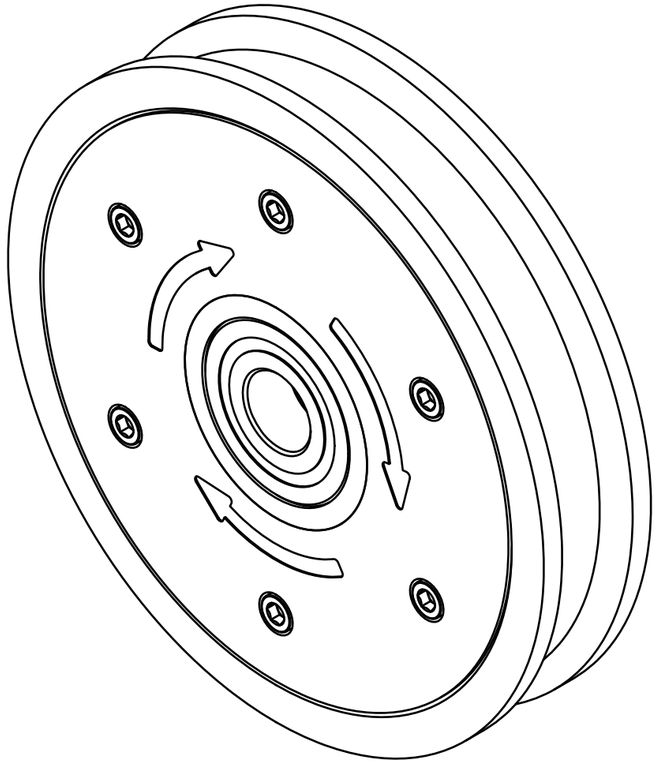
E.H. WACHS
600 Knightsbridge Parkway
Lincolnshire, IL 60069
www.ehwachs.com

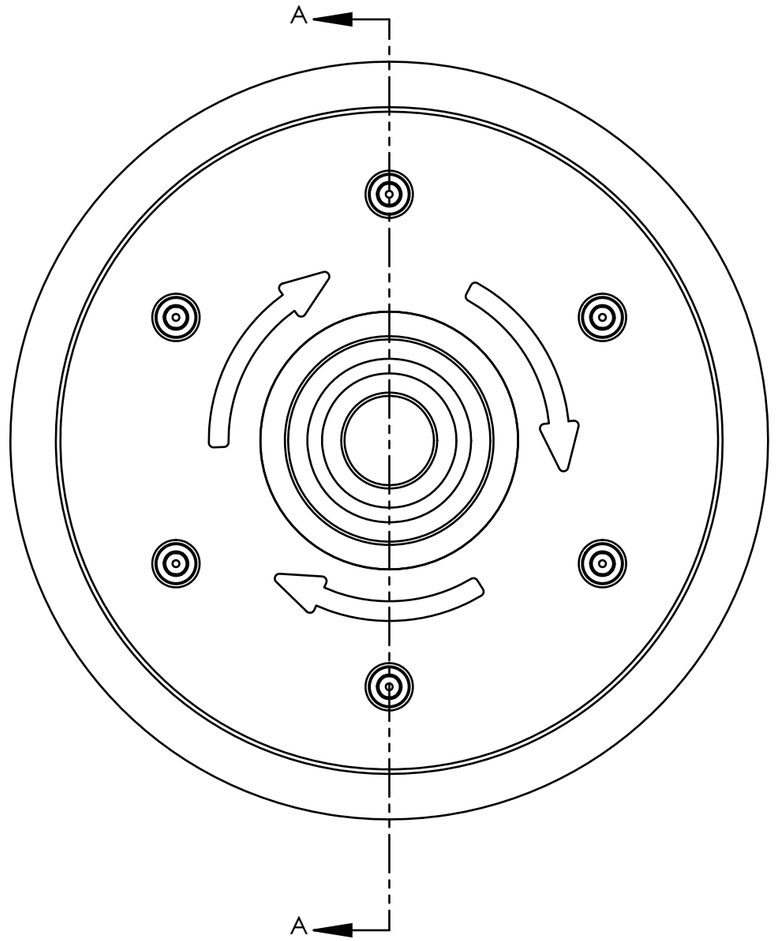
TITLE: FEED TOWER ASSEMBLY

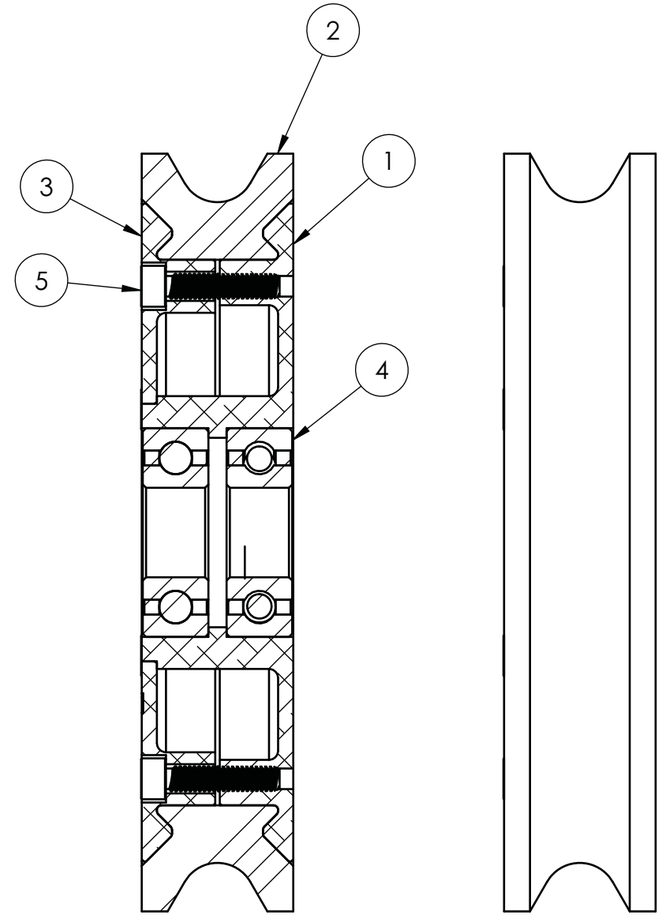
DRAWN BY	APPROVED BY	SCALE
DAL	GJD	1:4
DATE: 3/15/2012	DATE: 3/20/2012	SHEET: 1 OF 1

SIZE: D | DWG. NO.: **29-010-02-00** | REV.: 1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	29-010-03-01	HUB, IDLER WHEEL	1
2	29-010-03-02	GRIP, WHEEL IDLER	1
3	29-010-03-03	COVER, IDLER WHEEL	1
4	29-010-03-04	7202B-2RS Sealed Bearing	2
5	90-120-07	SHCS, #8-32 x 3/4" , SS 18-8	6







SECTION A-A

REV.	DESCRIPTION	DATE	APR.
1	Released For Production	10/4/2011	Karl K

REVISION HISTORY

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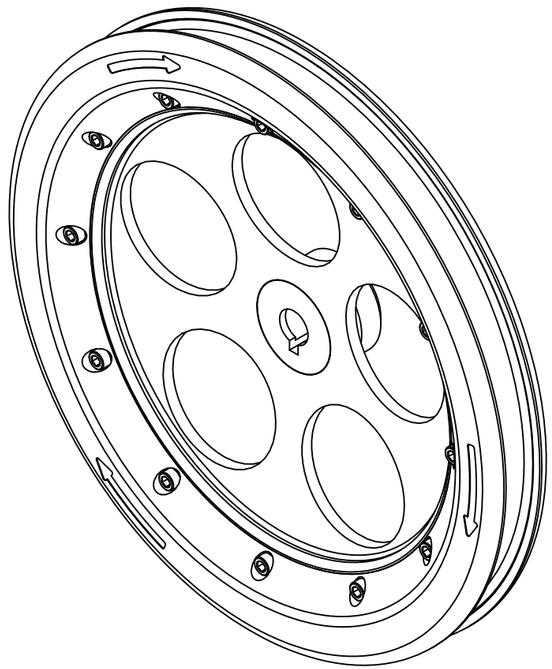
600 Knightsbridge Parkway
Lincolnshire, IL 60069
www.ehwachs.com

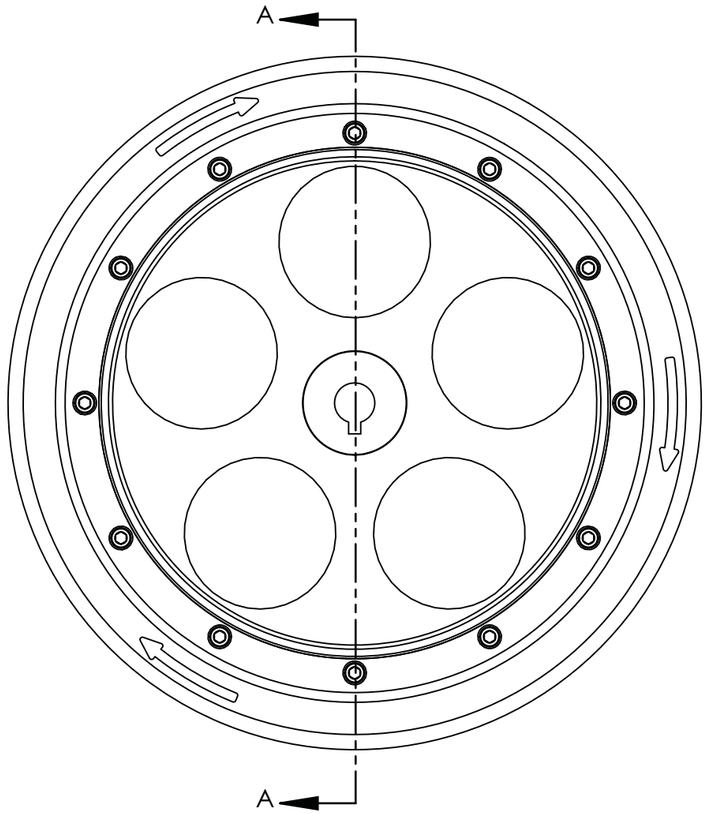
TITLE: ASSEMBLY, IDLER WHEEL

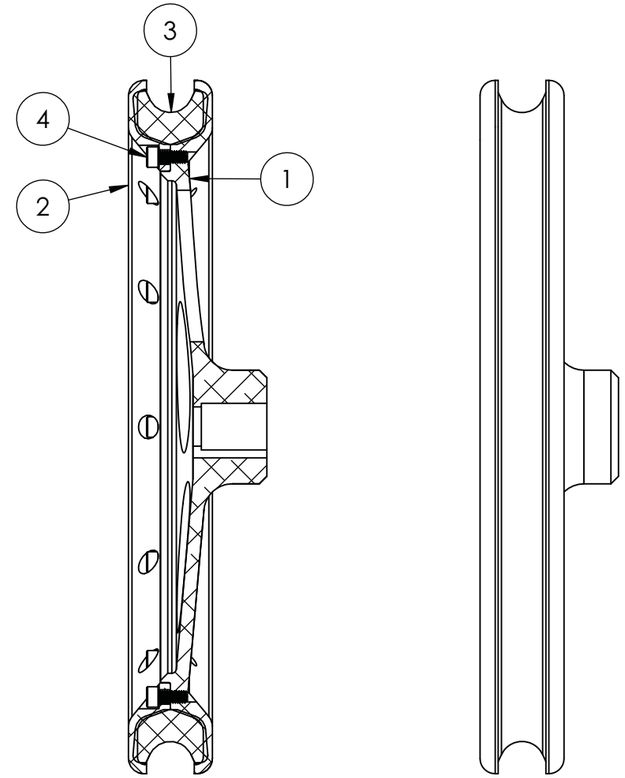
DRAWN BY	APPROVED BY	SCALE
Karl K	Karl K	1:1
DATE: 10/4/2011	DATE: 10/4/2011	SHEET: 1 OF 1

SIZE	DWG. NO.	REV.
B	**29-010-03-00**	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	29-010-04-01	HUB, DRIVE WHEEL	1
2	29-010-04-02	HUB, DRIVE WHEEL	1
3	29-010-04-03	LINER, WHEEL	1
4	90-120-03	8-32 x 3/8" SHCS SS	12







SECTION A-A

REV.	DESCRIPTION	DATE	APR.
1	Released For Production	10/4/2011	Karl K

REVISION HISTORY

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600 Knightsbridge Parkway
Lincolnshire, IL 60069
www.ehwachs.com

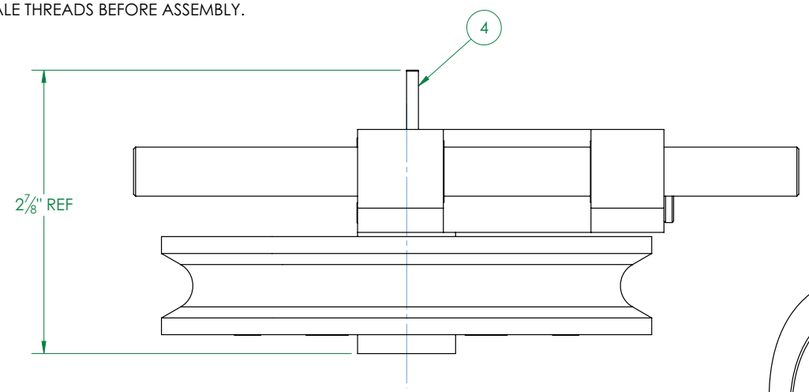
TITLE: DRIVE WHEEL ASSEMBLY

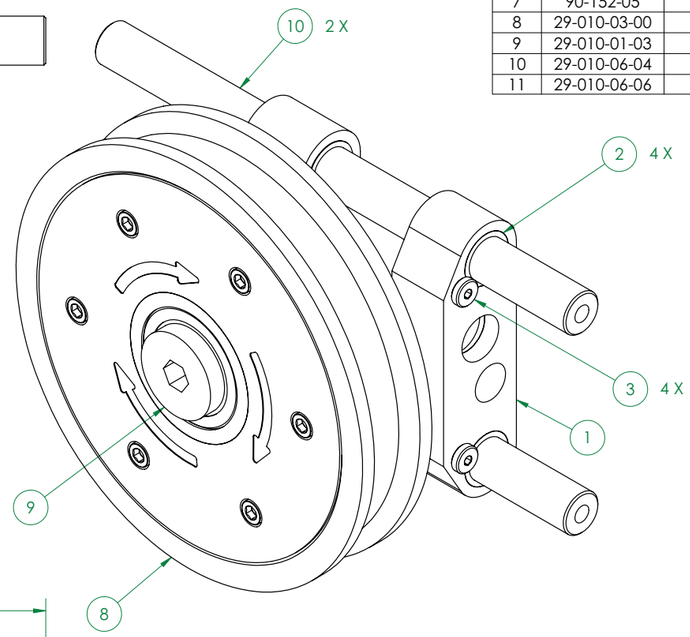
DRAWN BY	APPROVED BY	SCALE
Karl K	Karl K	1:2
DATE: 10/4/2011	DATE: 10/4/2011	SHEET: 1 OF 1

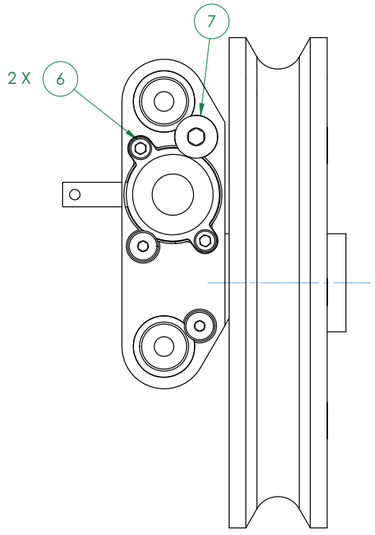
SIZE	DWG. NO.	REV.
B	**29-010-04-00**	1

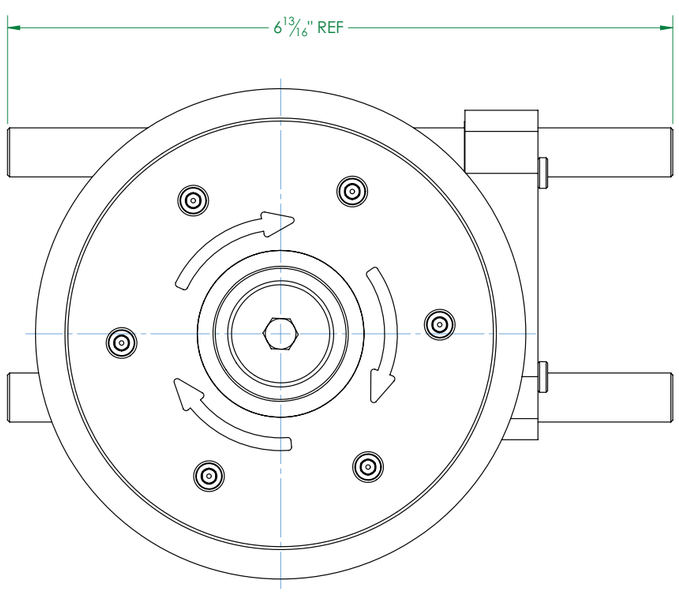
NOTES:
1) APPLY LOCTITE #242 OR EQ TO MALE THREADS BEFORE ASSEMBLY.
2)

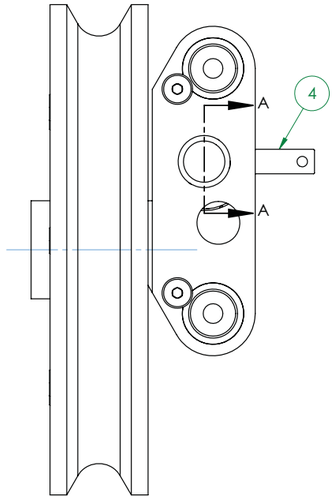
ITEM	PART NUMBER	DESCRIPTION	QTY.
1	29-010-06-01	TENSIONING SLIDE	1
2	29-010-06-05	BEARING, TENSION SLIDE	4
3	90-149-53	LHSHCS, #10-32 x 3/8, SS 18-8	4
4	29-010-06-02	POINTER, TENSION INDICATING	1
5	29-010-06-03	NUT, TENSIONING	1
6	90-100-05	SHCS, #6-32 X 1/2, SS 18-8	2
7	90-152-05	BHCS 1/4-20 x .500	1
8	29-010-03-00	ASSEMBLY, IDLER WHEEL	1
9	29-010-01-03	SHAFT, IDLER WHEEL	1
10	29-010-06-04	SHAFT, TENSION WHEEL	2
11	29-010-06-06	SPRING, TENSIONING	1

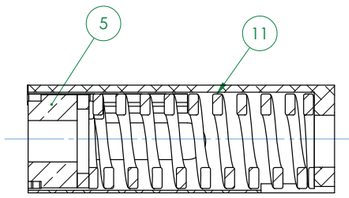












SECTION A-A

WEIGHT: 2.2 lbs.

E.H. WACHS COMPANY
455 Comanche Circle
Harvard, IL 60033
www.wachsco.com

TOLERANCES:
ONE PLACE DECIMAL ±.015 GENERAL FINISH 125
TWO PLACE DECIMAL ±.010 FRACTIONS ±1/32
THREE PLACE DECIMAL ±.005 ANGULAR ±15 MIN.

UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES.
E.H. WACHS CO. WORKMANSHIP STANDARDS (WI 17-01) SHALL APPLY TO ALL ITEMS NOT SPECIFIED ON DRAWING.
DO NOT SCALE DRAWING.

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REV.	ECO #	DESCRIPTION	DATE	APR.

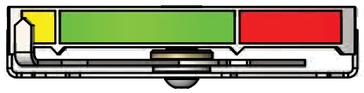
TITLE: ASSEMBLY, SLIDE

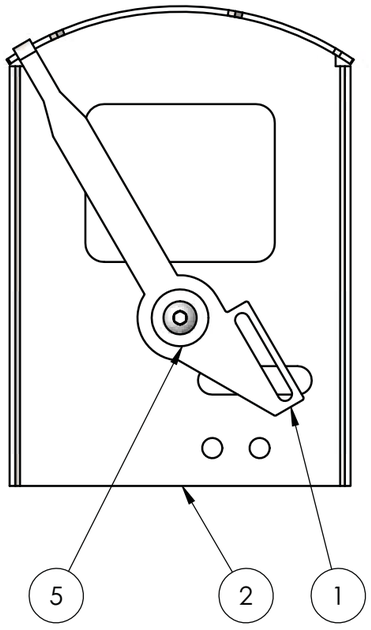
MATERIAL	DRAWN BY	DATE	SCALE
PER COMPONENT	DAL	3-15-12	1:1
FINISH	CHECKED BY	DATE	SHEET
PER COMPONENT	GJD	3-20-12	1 OF 1

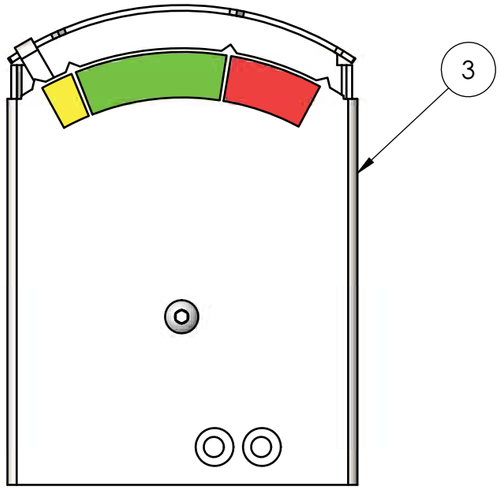
SIZE	DWG. NO.	REV.
C	29-010-06-00	

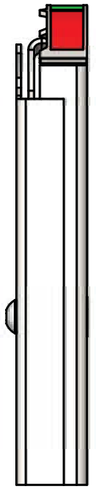
NOTES:
1. MATERIAL: See Part Material Info
2. FINISH: See Part Finish Info

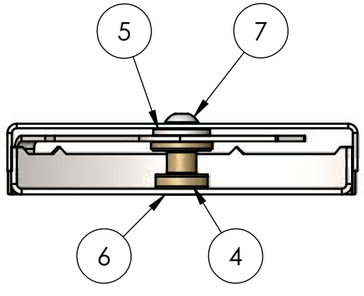
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	29-010-07-02	Pointer	1
2	29-110-06-00	Pointer Base Assembly	1
3	29-010-07-01	Pointer Cover	1
4	29-010-07-03	Pointer Pivot	1
5	29-010-07-04	3/8 SS Fixture Washer	1
6	90-053-05	1/4-20 x 1/2"lg FHSCS	1
7	90-152-03	BHCS .250-28 x .375 SS18-8	1











REV.	DESCRIPTION	DATE	APR.
1	Released For Production	12/12/2011	Karl K

REVISION HISTORY

UNLESS OTHERWISE SPECIFIED:
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E.H. WACHS WORKMANSHIP STANDARDS (WI 17-01)
SHALL APPLY TO ALL ITEMS NOT SPECIFIED ON DRAWING.
DO NOT SCALE DRAWING.

TOLERANCES:
FRACTIONS ±1/32
ONE PLACE DECIMAL ±.015
TWO PLACE DECIMAL ±.010
THREE PLACE DECIMAL ±.005
ANGULAR ±15 MIN.

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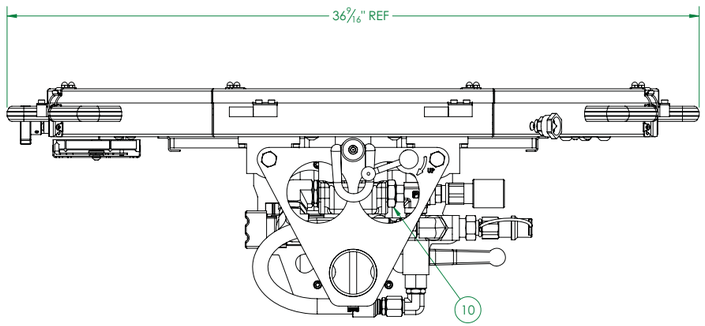
E.H. WACHS
600 Knightsbridge Parkway
Lincolnshire, IL 60069
www.ehwachs.com

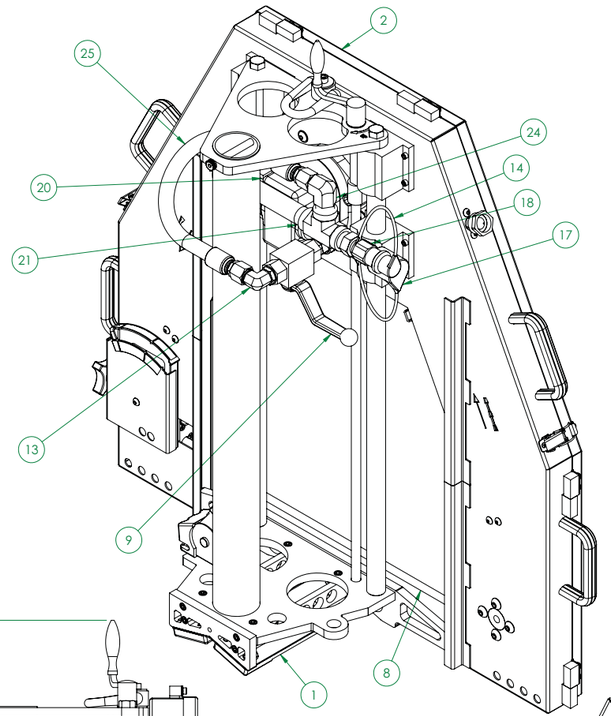
TITLE: Tension Indicator Assembly

DRAWN BY	APPROVED BY	SCALE
Karl K	Karl K	1:2
DATE: 12/12/2011	DATE: 12/12/2011	SHEET: 1 OF 1

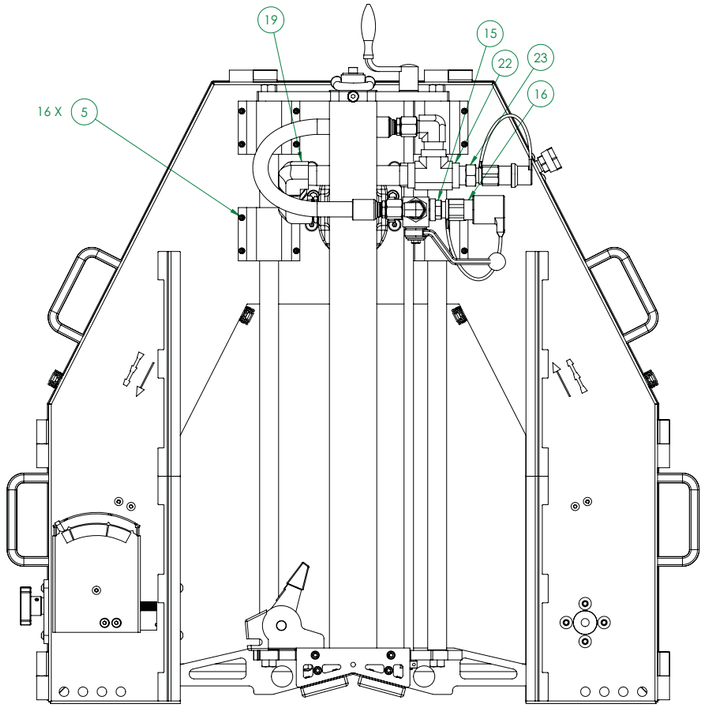
SIZE	DWG. NO.	REV.
B	**29-010-07-00**	1

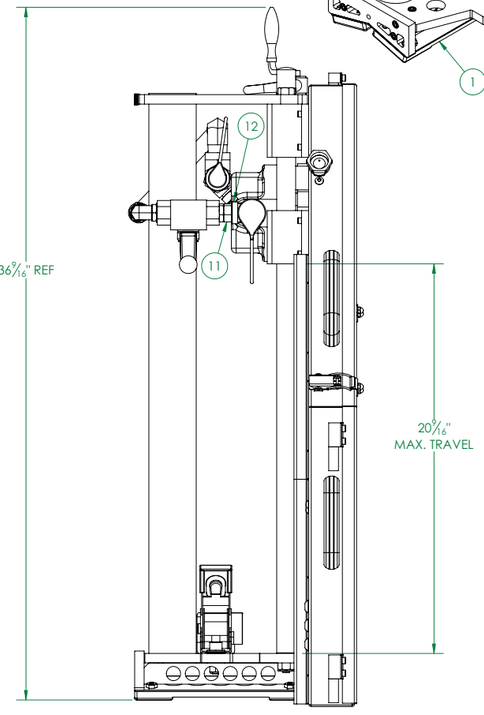
NOTES:
1) ASSEMBLE ITEMS 1 & 2 BEFORE ITEM 4.
2) APPLY LOCTITE #242 TO MALE THREADS BEFORE ASSEMBLY.

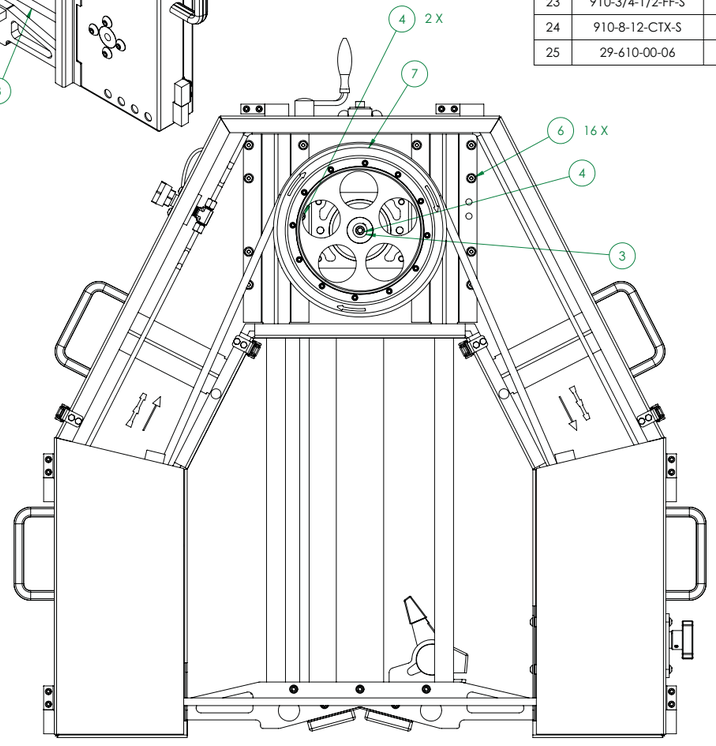




ITEM	PART NUMBER	DESCRIPTION	QTY.
1	29-010-02-00	FEED TOWER ASSEMBLY	1
2	29-010-01-00	BOW ASSEMBLY	1
3	90-065-55	5/16 HARDENED WASHER	1
4	90-160-07	SHCS 5/16-18 X 1.00 SS	3
5	90-140-57	SHCS #10-32 x 3/4, SS 18-8	16
6	90-145-05	10-32 Serrated Flange Nut	16
7	29-010-04-00	DRIVE WHEEL ASSEMBLY	1
8	29-601-10	DIAMOND WIRE LOOP, 95"	1
9	29-610-00-05	BALL VALVE, 12 SAE	1
10	910-12-8-f5og5-s	REDUCER/EXPANDER, STRAIGHT THRD12-8	1
11	910-8-f5ohao-s	STRAIGHT THREAD UNION, SAE-ORB/SAE-ORB -8	1
12	910-8-aog5jg5-s	STRAIGHT THRD RUN TEE, SAE ORB, -8	1
13	910-8-c5ox-s	STR THD ELBOW, FLARE TUBE END/STR THD O-RING	1
14	09-027-00	DUST CAP, MALE QUICK- DISCONNECT	1
15	910-8-1/2-F5OF-S	ADAPTER, 1/2" MALE PIPE TO 8 SAE ORB	1
16	09-025-00	QUICK DISCONNECT, FEMALE - HTMA 1/2 NPT F	1
17	09-028-00	DUST CAP, FEMALE QUICK-DISCONNECT	1
18	09-026-00	QUICK DISCONNECT, MALE - HTMA 1/2 NPT F	1
19	910-12-3/4-AOEG-S	FEMALE PIPE ELBOW, NPTF/SAE-ORB, -12	1
20	910-12-aoeg5-s	STRAIGHT THRD ELBOW, SAE-ORB	1
21	90-218-59	NIPPLE, 3/4" x 6" HP	1
22	910-.75-mmo-s	FEMALE PIPE TEE, NPTF	1
23	910-3/4-1/2-FF-S	PIPE NIPPLE, 1/2" X 3/4 NPTF	1
24	910-8-12-CTX-S	MALE ELBOW, 37° FLARE/NPTF	1
25	29-610-00-06	HOSE ASSEMBLY, BYPASS	1







COVER REMOVED FOR CLARITY

WEIGHT: 92.7 lbs.

E.H. WACHS COMPANY
455 Comanche Circle
Harvard, IL 60033
www.wachsco.com

TOLERANCES:
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DO NOT SCALE DRAWING.
ONE PLACE DECIMAL ±.015
TWO PLACE DECIMAL ±.010
THREE PLACE DECIMAL ±.005
GENERAL FINISH 125
FRACTIONS ±1/32
ANGULAR ±15 MIN.

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REV.	ECO #	DESCRIPTION	DATE	APR.

TITLE: DIAMOND WIRE GUILLOTINE, 4-16" DI

MATERIAL	DRAWN BY	DATE	SCALE
PER COMPONENT	DAL	3-15-12	1:4
FINISH	CHECKED BY	DATE	SHEET
PER COMPONENT	GJD	3-21-12	1 OF 1

SIZE: D
DWG. NO.: 29-010-10
REV.